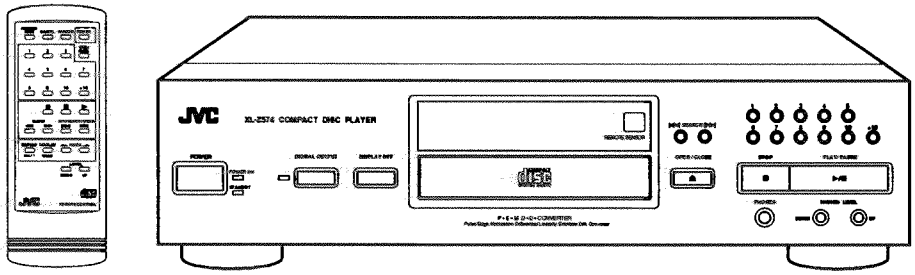
XL-Z574BK

JVC

SERVICE MANUAL

COMPACT DISC PLAYER

XL-Z574BK



COMPACT disc DIGITAL AUDIO

COMPU LINK Remote Control Component

※ *(NOTE) Adjustment is not necessary for this player.*

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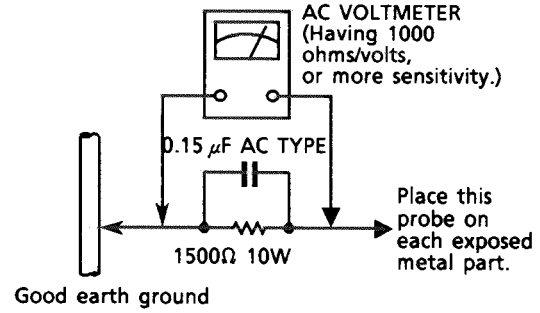
No. 20481
Jun. 1994

Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute repalcement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage currnet check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, contorl shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre the AC voltage across the resistor.
     Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

Important for Laser Products

1. CLASS 1 LASER PRODUCT
2. DANGER : Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.
4. CAUTION : The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.
5. CAUTION : If safety switches malfunction, the laser is able to function.
6. CAUTION : Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

VARNING : Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.

VARO : Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

ADVARSEL : Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

ADVARSEL : Usynlig laserstråling ved åpning, når sikkerhetsbryteren er avslott. unngå utsettelse for stråling.

REPRODUCTION AND POSITION OF LABELS

WARNING LABEL

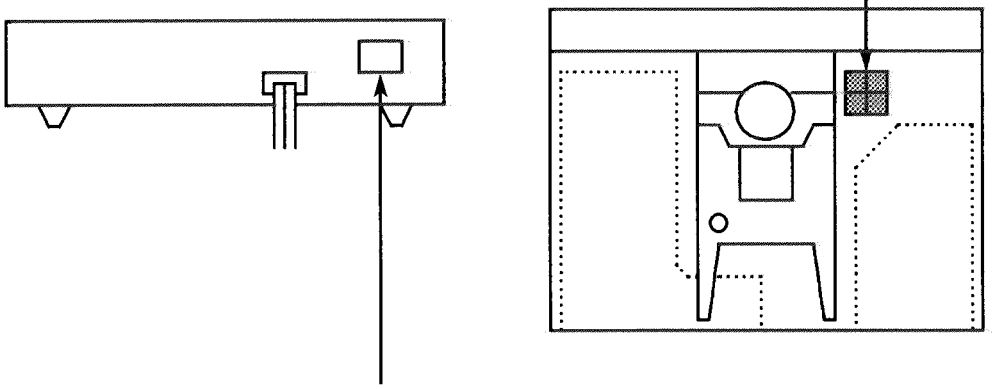
(Except for the U. S. A.)

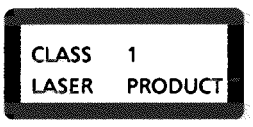
DANGER: Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)

VARNING: Osynling laserstråling när denna del å öppnad och spärren är urkoppled. Betrakta ej stålen. (s)

ADVARSEL: Usynling laserstråling ved åbning, når sikkerhedsafbrydere er ude at funktion. Undgåudsættelse for stråling. (d)

VARO: Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)





CLASSIFICATION LABEL

(Except for the U. S. A. and Canada)

Specifications

General

Format:	Compact disc digital audio
Signal detection system:	Non-contact optical detection
Sampling frequency:	44.1 kHz
Power requirements	
Continental Europe:	AC 230 V ∿ , 50Hz
United Kingdom:	AC 240 V ∿ , 50 Hz
Power consumption:	16 watts (POWER ON)
	3 watts (STANDBY)
Dimensions (W x H x D):	435 x 112 x 278 mm
	17-3/16 x 4- 1/2 x 11 inches
Weight:	4.9 kg (10.8 lbs)

Audio performance

Frequency response:	2 Hz to 20,000 Hz (±1 dB)
Dynamic range:	More than 100 dB (at 1 kHz)
Signal to noise ratio:	XL-Z574BK: More than 110 dB
	XL-Z674BK: More than 112 dB
Total harmonic distortion:	Less than 0.0015% (at 1 kHz)
Channel separation:	More than 106 dB (at 1 kHz)
Wow and flutter:	Below the measurable limit

Output level

FIXED OUTPUT:	2.0 Vrms (at 10 kohms)
OPTICAL DIGITAL OUT:	−21 dBm to −15 dBm

Accessories

Remote control unit (RM-SX674U) 1
Battery (UM-4/R03/AAA) 2
Audio cord 1
COMPU LINK cord 1

Design and specifications subject to change without notice.

INTRODUCTION

Precautions

Load compact disc only
Never insert anything other than a compact disc into any part of the player.

If a problem persists
If something goes wrong, turn off the power immediately. If the same problem reoccurs when the power is turned on once more, turn off the power again and consult your JVC dealer.

Handling the power cord
When unplugging from the wall socket, always pull the plug body, never the power cable.

Volume settings
A CD player has almost zero background noise. Because of this, the technique of listening to the background level and then setting the volume before the music starts, as used with analog turntables or tape decks, cannot be used. If you raise the volume level too high, speaker damage may result.

Condensation
The CD player uses optical components. If it is moved from a cold location to a warm one, or is used in a room subject to excessive humidity or where a fire has just been lit, condensation could form on the optical components.
This may prevent the laser beam from being properly transmitted and thus causes noise or even a malfunction.
If condensation has formed and the CD player does not function correctly, we recommend that you leave it turned on for an hour or two. If at the end of this time the CD player still does not function properly, please consult your JVC dealer.

Transporting the unit
When carrying this unit, it is best to avoid either tilting it or turning it upside-down. Where you cannot avoid doing so, please remove the disc first.

Using compact discs
Compact discs are made of plastic and can be easily damaged. If the disc is dirty, scratched, warped or otherwise damaged, the digital information may not be picked up correctly.

Applicable discs
This unit can only be used with compact discs bearing the mark below. Never use discs of other types.

COMPACT disc DIGITAL AUDIO

About this manual

This manual covers the operating instructions for the compact disc player XL-Z574BK and XL-Z674BK.
There are several functions which require separate instructions for each model. Please check the model number stated on the carton box, and follow the descriptions applicable to your unit.

This manual is organized as follows:

The first part, "INTRODUCTION", gives you the precautions when using this unit, and shows you the names of buttons on the main unit and the remote control unit.

The second part, "BEFORE USING FOR THE FIRST TIME", tells you what kind of operations you should do before playing a disc. This part describes where to place the unit for best results, how to install batteries in the remote control unit and how to connect this unit to the amplifier/receiver and other components.

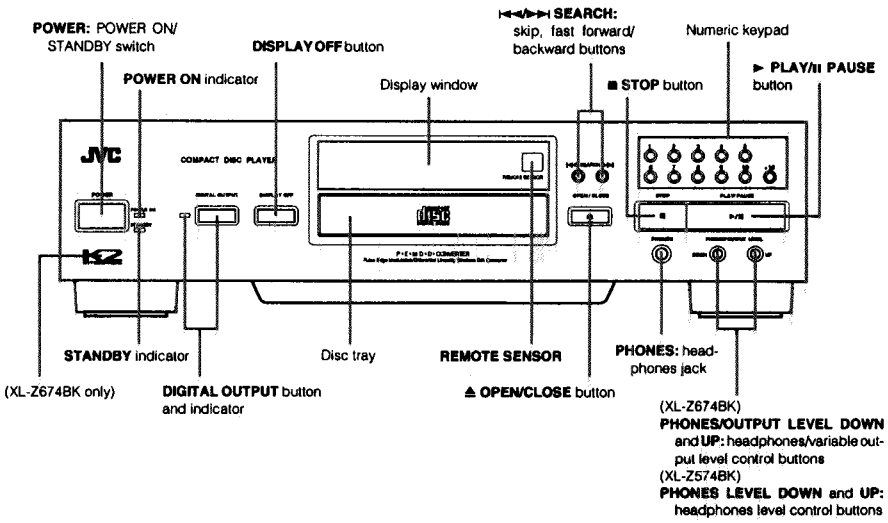
The third part, "BASIC OPERATIONS", describes how to load a disc, and convenient basic functions for playing disc.

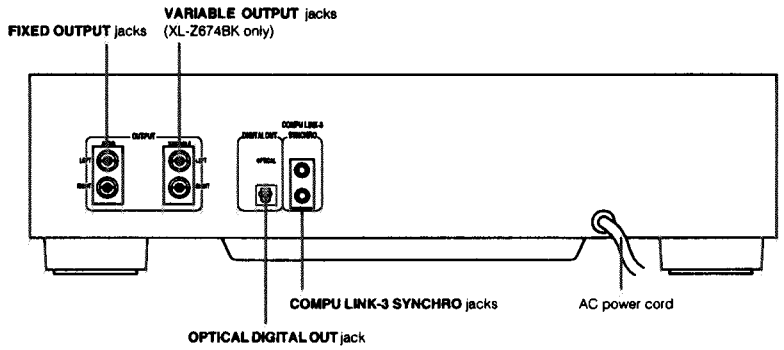
The fourth part, "VARIOUS PLAYBACK PATTERNS", describes various functions for playing disc, and convenient functions for recording.

The fifth part, "GENERAL INFORMATIONS", describes the COMPU LINK remote control system which facilitates various operations between JVC components, and explains how to take care of discs.
This part also includes "Troubleshooting" which tells you how to check the unit when a malfunction occurs, and the technical informations regarding this unit.

Names of buttons

Main unit





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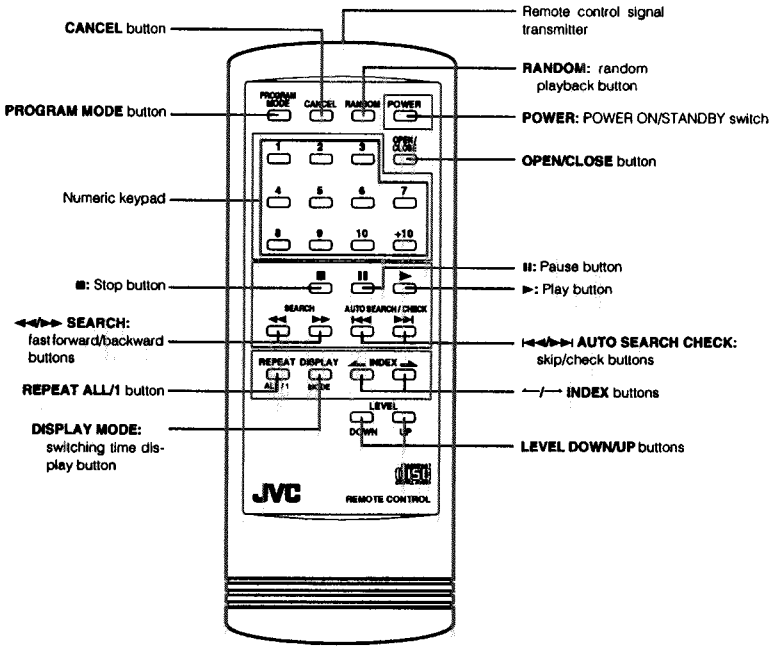
XL-Z574BK

Remote control unit



BEFORE USING FOR THE FIRST TIME

Installing the unit

Best location
Select a location which is level, dry and neither too cold nor too hot (temperature range 5°C (41°F) to 35°C (95°F)). Also, avoid dusty locations or any location subject to vibration.

If interference occurs
If this equipment is placed near a tuner or a radio receiver tuned to AM frequencies, interference may occur. If this happens, we recommend either that you move this unit as far away as possible from the tuner or receiver or briefly turn off the power to this unit.

Connecting to other equipments

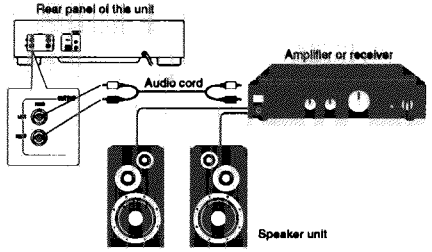
Connecting to an amplifier or receiver allows you to listen to the sound from the speakers.
With XL-Z574BK, only the connection with the fixed output level is available and the output sound level is to be controlled by the amplifier. With XL-Z674BK, on the other hand, it is also possible to get the output of variable level, which is controlled by this unit.

To connect with the fixed output level

There are two ways to connect an amplifier or receiver; with the analog FIXED OUTPUT jacks and the OPTICAL DIGITAL OUT jack.

For analog connections
Connect the FIXED OUTPUT jacks of this unit to the line input jacks of an amplifier or receiver with the supplied audio cord.

Notes
- *Never connect the OUTPUT jacks to the PHONO jacks of the amplifier or receiver. This may cause damage to the components.*
- *Make sure that the same channels are connected between this unit and the amplifier or receiver: LEFT to LEFT and RIGHT to RIGHT.*
- *Do not connect the power plug until all connections are completed.*
- *Connect the plugs firmly. Loose connections may cause noise or malfunction.*



For digital connections

Connect the OPTICAL DIGITAL OUT jack of this unit to the optical digital input jack of the amplifier or receiver with the following method.

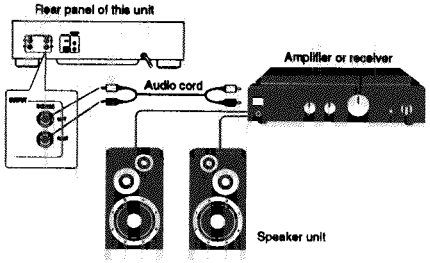
1. Remove the protective dust cap from the OPTICAL DIGITAL OUT jack of this unit and the optical digital input jack of the amplifier or receiver.
2. Connect the OPTICAL DIGITAL OUT jack and the input jack with the optional optical fiber cable.
3. After all the connections are complete, press the DIGITAL OUTPUT button on this unit so that the indicator is lit.

Notes

- ***Be sure to use the amplifier or receiver which uses the same type of optical transmission/reception module.***
- ***Be careful not to fold or crimp the cable. When coiling an optical fiber cable for storage, make sure that the diameter of the coil is 15 cm (6 inches) or more.***
- ***Use an optical fiber cable with a length of 3 m (9 feet) or less.***
- ***Protect the optical fiber cable plugs from scratches and dust.***
- ***When the unit is not connected using an optical fiber cable, be sure to keep the protective dust cap plugged into the optical digital output jack at all time.***

To connect with the variable output level (for XL-Z674BK)

Connect the VARIABLE OUTPUT jacks of this unit to the line input jacks of an amplifier or receiver with the supplied audio cord. Output level can be varied by pressing the LEVEL buttons on the remote control unit or the PHONES/OUTPUT LEVEL buttons on the main unit.



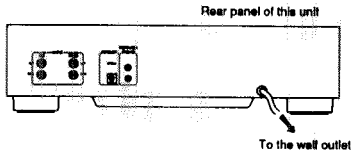
Supplying the power

To connect the AC power cord of the main unit

Connect the AC power cord of the unit to the wall outlet after all connections are completed.

Note

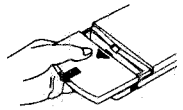
When using the COMPU LINK Remote Control System, do not connect the power cord to the SWITCHED AC OUTLET of an amplifier or receiver.



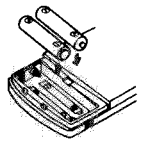
To install the batteries in the remote control unit

Before operating the remote control unit, install two batteries.

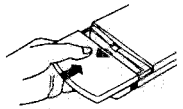
1. **Remove the rear cover of the remote control unit by pressing down and simultaneously pulling it backwards.**



2. **Install batteries. Be sure that the batteries are installed with correct polarity, (+) and (–).**



3. **Attach the rear cover by sliding it back into position.**



Notes

Incorrect use of batteries can cause corrosion or damage. Note the following points to lengthen battery life.

- *Install batteries observing the correct polarity, (+) and (–).*
- *Do not use new and old batteries simultaneously.*
- *Batteries with similar shapes may have different voltage ratings. Be sure to use the correct batteries.*
- *Remove batteries from the remote control unit if it will not be used for a long period of time.*
- *Do not expose batteries to heat or flame.*

Battery replacement

Service life of batteries depends on the condition of use; standard life is about one year. When the batteries become weak, the operating distance of the remote control unit becomes short . If this happens, replace the batteries (1.5 V, UM-4/R03/AAA) with new ones.

Note

- *The lower the temperature, the shorter the battery life.*

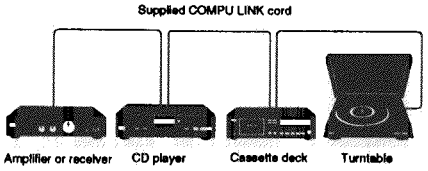
COMPU LINK connection

JVC's COMPU LINK Remote Control System provides unified control over system components connected with COMPU LINK. Connecting JVC audio components with the COMPU LINK jacks automatically controls relative operations between components and facilitates various operations. With the COMPU LINK connection to an amplifier or receiver, you can operate XL-Z574BK/XL-Z674BK with the amplifier or receiver's remote control unit. Synchronized recording is also available with this feature.

Connecting the COMPU LINK cord

The COMPU LINK-3 SYNCHRO jacks are used to output and input the control signal for the COMPU LINK remote control system.
COMPU LINK-compatible products are provided with the jacks marked COMPU LINK-1, COMPU LINK-2 or COMPU LINK-3, referring to the COMPU LINK version. XL-Z574BK/XL-Z674BK is equipped with COMPU LINK-3. You can connect XL-Z574BK/XL-Z674BK also to a component with a lower COMPU LINK versions. But, in that case, only the lower versions' features will be available.
Plug the supplied COMPU LINK cord into the COMPU LINK-3 SYNCHRO jack on the rear panel of XL-Z574BK/XL-Z674BK. Plug the other end into the COMPU LINK jack of the other component. If there are two COMPU LINK jacks, plug it into either of them.

Connecting the COMPU LINK system components with the COMPU LINK cords



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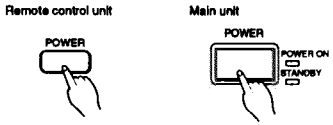
XL-Z574BK

BASIC OPERATIONS

Basic functions for disc playback

Turning on the power of this unit

Press the POWER switch to turn on this unit. The POWER ON indicator is lit.



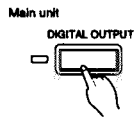
Press again to turn the power off and activate the standby mode. The STANDBY indicator is lit.

The power is automatically turned on also by;
- Pressing the ⏏ OPEN/CLOSE button.
- Pressing the ► button on the remote control unit or the ► PLAY/II PAUSE button on the main unit.

Notes
- *A small amount of power (3 watts) is consumed even in the standby mode.*
- *To turn the power off completely, disconnect the power cord from the wall outlet.*

Obtaining digital output

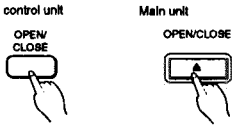
Press the DIGITAL OUTPUT button to make the signal output from the OPTICAL DIGITAL OUT jack. The indicator is lit.



Press again to cut the digital output signal and have only the analog output from the FIXED (or VARIABLE for XL-Z674BK) OUTPUT jacks. The DIGITAL OUTPUT indicator is turned off.

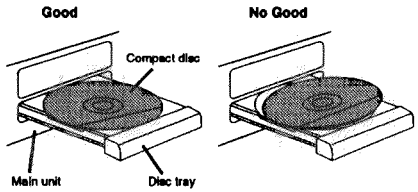
Loading a disc in the disc tray

Use the ⏏ OPEN/CLOSE button to open and close the disc tray.



1. **Open the disc tray by pressing the ⏏ OPEN/CLOSE button.**
2. **Place a disc on the disc tray according to the groove with its label side up.**
3. **Close the disc tray by pressing the ⏏ OPEN/CLOSE button.**

Note
- *When loading a disc in the disc tray, be sure to put the disc according to the groove. Otherwise, the disc will be damaged when the disc tray is closed, and the disc cannot be removed from the unit.*

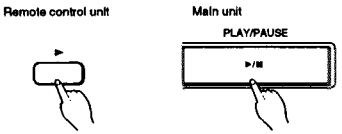


Remote control operation

Point the remote control unit towards the REMOTE SENSOR and operate it steadily and carefully. The remote control unit can be used within a range of about 7 meters (23 feet) from the REMOTE SENSOR, and at angles of up to about 30 degrees.

Playing a disc

Press the ► button on the remote control unit or the ► PLAY/II PAUSE button on the main unit.

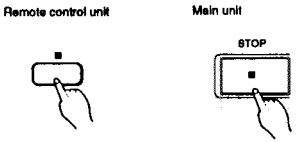


The ► indicator lights on the display and playback starts.
When no disc is loaded in the unit, the disc tray opens.

To stop playback temporarily, press the II button on the remote control unit or the ► PLAY/II PAUSE button on the main unit.
The II indicator lights on the display and playback stops temporarily.
To resume playback, press the ► button on the remote control unit or the ► PLAY/II PAUSE button on the main unit.

Stopping playback

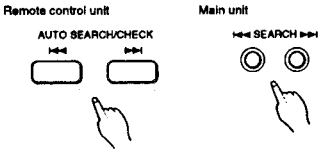
Press the ■ button.



Locating a point to start playback

Skipping to a desired track

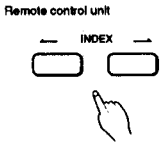
Use the ⏮/⏭ buttons.



To skip back to the beginning of the track being played, tap the ⏮ button. When the beginning of the track is reached, tapping this button again skips to the previous track.
To skip to the next track, tap the ⏭ button.
When using the ⏮/⏭ SEARCH buttons on the main unit, tap them until the desired track appears.

Skipping to a desired index (for a disc marked with INDEX)

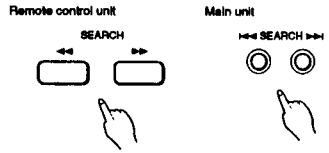
Use the ←/→ INDEX buttons.



To skip back to the beginning of the index being played, tap the ← INDEX button. When the beginning of the index is reached, tapping this button again skips to the previous index.
To skip to the next index, tap the → INDEX button.

Searching for a desired section

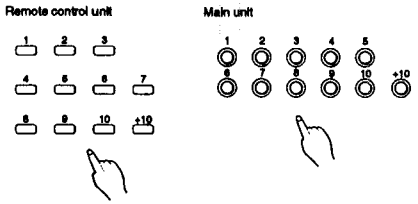
Keep the ◄◄/►► SEARCH buttons on the remote control unit or the ⏮/►►⏭ SEARCH buttons on the main unit pressed during playback.



Playback advances or reverses rapidly.
While the ◄◄ or ⏮◄◄ button is kept pressed, playback rapidly reverses toward the beginning of the track. While the ►► or ►►⏭ button is kept pressed, playback rapidly advances toward the end of the track. When the desired section is reached, release the button. The player resumes normal playback from that point.

Specifying a desired track

To specify the desired track number, use the numeric keypad (1-10, +10).



The unit searches for the selected track and playback starts automatically.
When selecting track number 10 or less, press the corresponding numeric button. When selecting track number 11 or above, use the [+10] button.
Example: To select track number 12, press [+10] and then [2].
To select track number 25, press [+10] twice and then [5].
To select track number 30, press [+10] twice and then [10].

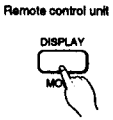
Note
If the selected track number does not exist on the selected disc, playback starts from the final track on that disc.

Switching the display

You can switch the time display mode to obtain informations about the playing time of the disc, and also turn on/off the display during playback.

Switching the time display

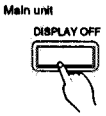
Each time the DISPLAY MODE button is pressed, the time display changes as the following.



Elapsed time → Remaining play time → Total playback time of the disc → Remaining play time of the disc → Elapsed time
The corresponding indicator lights in each time mode.
EACH: Shows the elapsed time of the track being played.
REMAIN: Shows the remaining playback time of the track being played.
TOTAL: Shows the total playing time of the disc being played.
TOTAL REMAIN: Shows the remaining playback time of the disc being played.

Turning off the display during playback

Press the DISPLAY OFF button during playback.



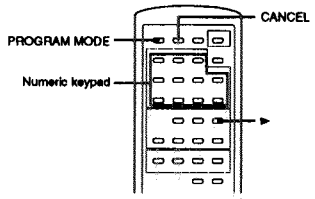
The display is automatically turned on when unit enters in stop or search mode.
It is recommendable to utilize this function, since the sound quality is improved by turning off the display.

To cancel the function and turn on the display, press the POWER switch to set the unit to standby mode or open the disc tray by pressing the ▲ OPEN/CLOSE button. If the unit is still playing back a disc, press the DISPLAY OFF button again.

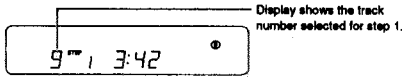
VARIOUS PLAYBACK PATTERNS

Playing tracks in a desired order

You can play only the favorite tracks in any desired order.



1. **In stop mode, press the PRAGRAM MODE button.**
2. **Select the track number with the numeric keypad.**
   Refer to "Specifying a desired track" on page 9 for entering the track number.
   The selected track number is programmed and the following display appears.



- If you want to cancel the displayed program step, press the CANCEL button and then enter the new track number.

3. **Repeat step 2 for other tracks to be programmed.**
   You can program up to 32 tracks.
4. **Start playback by pressing the ► button.**
   The programmed tracks are played in the programmed order.

- You can skip to a desired program step with the ⏮◄◄ or ►►⏭ button.

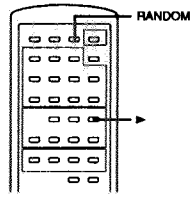
To check the program contents
Press the ⏮◄◄ or ►►⏭ button during stop mode. Each time the ⏮◄◄ or ►►⏭ button is pressed, the program contents are displayed in the programmed order or the reverse order.

To exit program mode
Press the PROGRAM MODE button again, and the program mode is cancelled.

To clear the entire program
In stop mode, press the ■ STOP button on the main unit. The program contents will be cleared, however, the program mode is not canceled.

Playing tracks in a random order

You can select and play tracks in random order. Selections are made so that each track in the disc is played only once.



1. **Press the RANDOM button so that the RANDOM indicator lights on the display.**
2. **Press the ► button and start playback.**

- To skip to the track to be played next, press the ►►⏭ button.

To cancel random playback
Press the RANDOM button on the remote control unit or the ■ STOP button on the main unit. The RANDOM indicator goes out and the random playback is cancelled.

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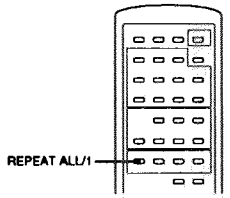
XL-Z574BK

Playing repeatedly

You can repeatedly play the whole disc or one track.
It is also possible to utilize this function in combination with random/program playback function.



Repeating whole disc

Press the REPEAT ALL/1 button so that the REPEAT indicator lights on the display.

All tracks are played repeatedly.

Repeating one track

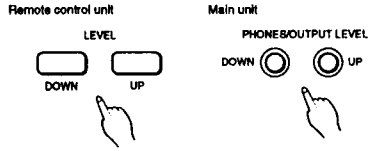
Press the REPEAT ALL/1 button so that the REPEAT 1 indicator lights on the display.

The displayed track is played repeatedly.

To cancel repeat mode
Press the REPEAT ALL/1 button so that the REPEAT and REPEAT 1 indicators go out.

Adjusting the output level

For XL-Z574BK, adjust the output level to the VARIABLE OUTPUT jacks with the LEVEL buttons on the remote control unit or the PHONES/OUTPUT LEVEL buttons on the main unit.
When you connect the headhones to the PHONES jack, also the headphones level is adjusted simultaneously.



For XL-Z574BK, output level is fixed and only the headphones level can be adjusted. Use the LEVEL buttons on the remote control unit or the PHONES LEVEL buttons on the main unit.

COMPU LINK remote control system

The COMPU LINK Remote Control System controls relative operations between components automatically and facilitates various operations.

This is a system originated and developed by JVC for facilitating various system operations.
The following is a brief explanation of this system:

Automatic source selection
When the COMPU LINK cord provided is utilized to connect this unit to others equipped with COMPU LINK jacks, switching-in of each system component can be performed with a single touch of the source selector button located on a JVC amplifier or receiver.
When selection is carried out in this manner, the corresponding unit will automatically start operation.
Upon pressing the play button, the source selector for the amplifier or receiver changes automatically. When a new unit is switched in, the previously selected component stops operation within five seconds.

Synchronized recording
Synchronized recording refers to the process in which a JVC cassette deck starts recording, synchronized with this unit. Synchronized recording is carried out as follows:

1. Set the cassette deck to the recording pause mode in accordance with its instructions.
2. To record only certain tracks, program the tracks in any order, as desired.
3. Press the ► PLAY/II PAUSE button on the front panel of this unit. The cassette deck automatically starts recording, synchronized with this unit.

Notes

- *Synchronized recording stops automatically when this unit stops playback.*
- *To cancel synchronized recording, press the ■ STOP button of this unit or the cassette deck.*
- *If the recording pause mode is set on the cassette deck by pressing the II PAUSE button after pressing the ● REC and ► PLAY buttons simultaneously, synchronized recording is not possible. For details, refer to the instructions for the cassette deck.*

Automatic power on/off function
This function is to control the power on/off of the receiver or amplifier or this unit respectively as the followings.

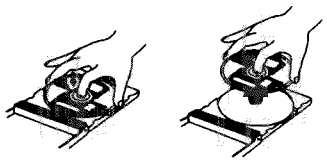
- When this unit enters playback mode, the power of the receiver or amplifier is turned on.
- When the source selector of the receiver or amplifier is set to CD function mode, the power of this unit is turned on.

Notes

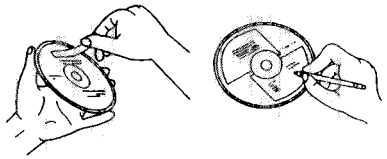
- *Abnormal operation will result if the power supply of the component(s) is interrupted. If this happens, you must start over again.*
- *Ensure that the COMPU LINK jacks of the individual components are connected with the provided COMPU LINK cord. Also be sure to fully read the instructions for each component.*

Care and handling

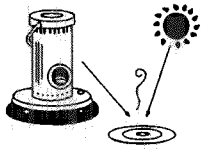
How to handle CDs
When handling compact discs, do not touch the surface of the disc (reflective silver side - the side without the label).
Since compact discs are made of plastic, they are easily damaged. If the disc gets dirty, dusty, scratched or warped, the sound will not be picked up correctly and, in addition, such discs may cause the CD player to malfunction.



Even on label side
Do not damage the label side, stick paper to or use any adhesive on this surface.



Storage
Make sure that discs are kept in their cases. If discs are piled one on top of another without their protective cases, they can be damaged.
Do not put discs in any location where they can be exposed to direct sunlight - or in any place where humidity or temperature is high. Avoid leaving discs in your car!



Maintenance of discs
When there are fingerprints or other dirt adhering to a disc, wipe the disc with a soft, dry cloth with a movement going from the inside outwards.
If difficult to clean, wipe the disc with a cloth moistened with water.
Never use record cleaners, petrol, alcohol or any anti-static agents.

Troubleshooting

What appears to be a malfunction may not always be serious. Please go through the following list before requesting service.

Symptom	Possible cause	Remedy
The unit is not operative.	Power plug is disconnected from the AC outlet.	Connect the plug to an AC outlet.
	Disc is not loaded.	Load a disc in the disc tray.
The remote control unit does not function.	Batteries are exhausted.	Replace both batteries.
	There is an obstacle between remote control unit and the REMOTE SENSOR of the main unit.	Remove the obstacle.
	Direct sunlight shines on the REMOTE SENSOR of the main unit.	Shade the unit from the direct sunlight.
Playback is not possible.	Disc is inserted upside down.	Load a disc with its label-side up in the disc tray.
	Disc is not loaded in the correct position.	Load the disc according to the groove of the disc tray.
	Moisture is condensed inside the unit.	Leave the unit turned on until the moisture evaporates.
No sound from the headphones.	Output volume is set to the minimum level.	Adjust the volume with the PHONES/ OUTPUT LEVEL DOWN/UP buttons.
The reproduced sound includes noise.	Disc is dirty.	Wipe off the disc surface with a soft cloth.
	Disc is warped.	Replace the disc with a new one.
The sound is intermittent.	Disc is scratched.	Replace the disc with a new one.

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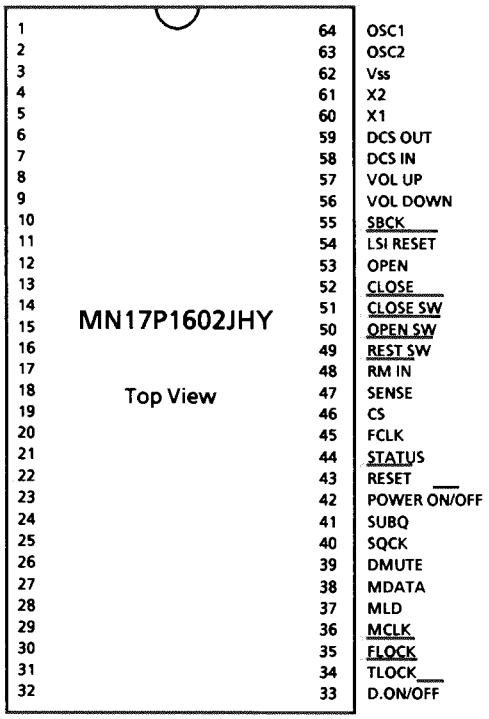
XL-Z574BK

Description of Major LSIs

■ MN17P1602JHY (IC201) : CD SYSTEM CONTROLLER

1. Terminal Layout



2. Key Matrix

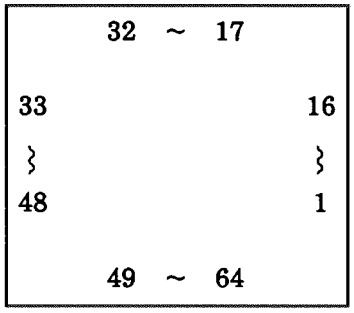
	KEY IN 11	KEY IN 12	KEY IN13
1G	⏏	1	6
2G	⏮	2	7
3G	⏭	3	8
4G	VOL.UP	4	9
5G	VOL.DN	5	10
6G	▶/II	■	+10

3. Description

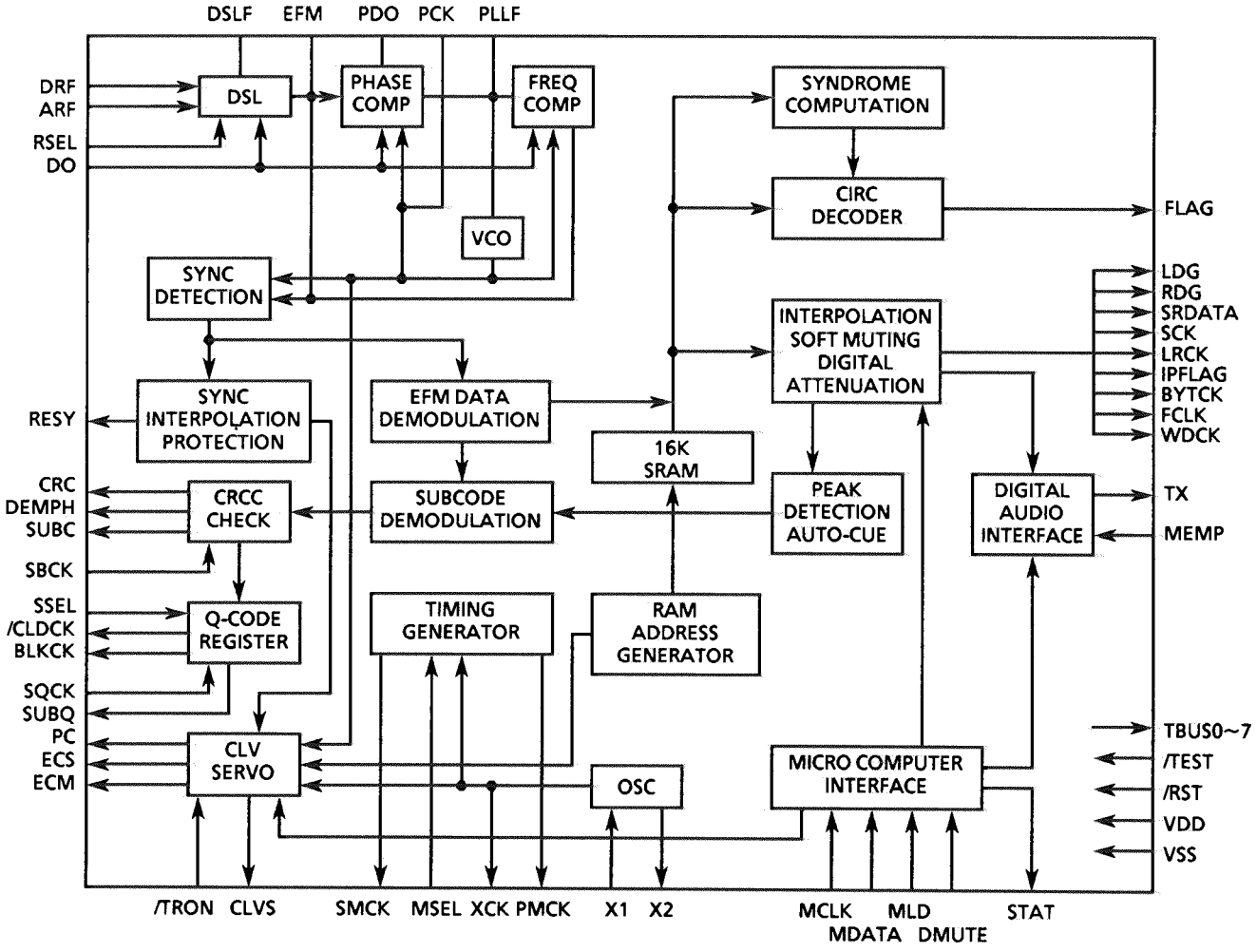
Pin No.	symbol	I/O	Description	Pin No.	symbol	I/O	Description
1	VDD	–	Power supply	33	D.ON/OFF	O	Condition of D out put
2	KEY 10	I	Key matrix input	34	TLOCK	I	Tracking sirvo an incoming signal input
3	KEY 11	I	〃	35	FLOCK	I	Focus sirvo an incoming signal input
4	KEY 12	I	〃	36	MCLK	O	μ-com command clock signal output
5	KEY 13	I	〃	37	MLD	O	μ-com command load signal output
6	12G	O	FL grid control output	38	MDATA	O	μ-com command data output
7	11G	O	〃	39	DMUTE	O	Muting signal output
8	10G	O	〃	40	SQCK	I	80-bit Sub Q and 16-bit PCM Peak Level Data
9	9G	O	〃	41	SUBQ	O	Sub-code Q-code output
10	8G	O	〃	42	POWER ON/OFF	O	H : power off, L : power on.
11	7G	O	〃	43	RESET	I	Reset signal input
12	6G	O	Partly key matorix out put	44	STATUS	I	Status signal input
13	5G	O	Partly key matorix out put	45	FCLK	–	Not use
14	4G	O	Partly key matorix out put	46	CS	I	Key matrix input
15	3G	O	Partly key matorix out put	47	SENSE	I	Sense signal input
16	2G	O	Partly key matorix out put	48	RM IN	I	Remote control signal input
17	1G	O	Partly key matorix out put	49	REST SW	I	Rest sw input
18	-VDISP	–	Power supply for FL display	50	OPEN SW	I	"L" with tray opened
19	S1	O	FL segment control output	51	CLOSE SW	I	"L" with tray closed
20	S2	O	〃	52	CLOSE	O	"CLOSE" signal output
21	S3	O	〃	53	OPEN	O	"OPEN" signal output
22	S4	O	〃	54	LSI RESET	O	LSI reset signal output
23	S5	O	〃	55	SBCK	–	Not use
24	S6	O	〃	56	VOL DOWN	O	Volume down signal output
25	S7	O	〃	57	VOL UP	O	Volume up signal output
26	S8	O	〃	58	DCS IN	I	Compulink signal input
27	S9	O	〃	59	DCS OUT	O	Compulink signal output
28	SARS	I	Rolate to A/D convertion	60	X1	–	Connected to GND
29	A/D	I	Rolate to A/D convertion	61	X2	–	Non connection
30	ADCK	O	Rolate to A/D convertion	62	Vss	–	Connected to GND
31	ADCS	O	Rolate to A/D convertion	63	OSC2	O	Clock oscillation output
32	TEST	i	Entering test mode with "L"	64	OSC1	I	Clock oscillation input

■ MN6626M (IC401) : DIGITAL SIGNAL PROCESSER

1. Terminal Layout



2. Block Diagram

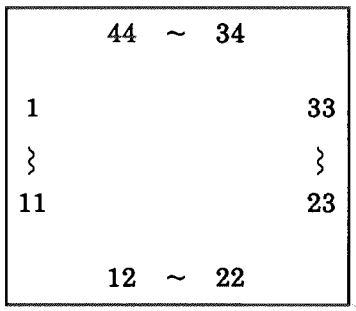


3. Description

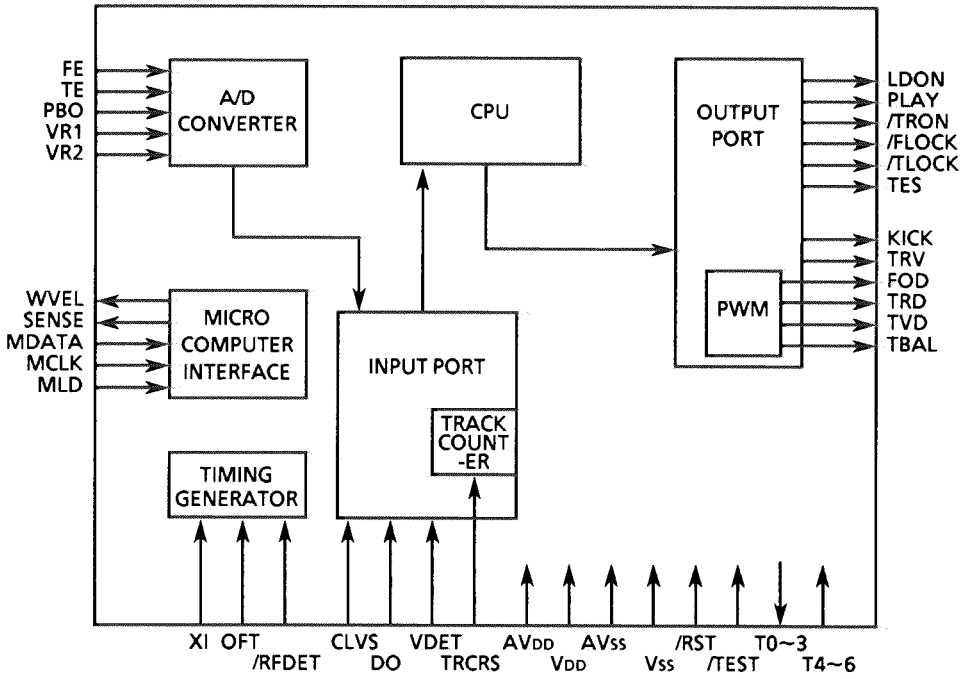
Pin No	Symbol	I/O	Description
1	AVSS	—	GND (for DSL, PLL)
2	IREF	I	Reference current input pin
3	ARF	I	RF signal input pin
4	DRF	I	Bias adjustment pin for DSL
5	DSLF	O	Loop filter pin for DSL
6	PLLF	I/O	Loop filter pin for PLL
7	AVDD	I	Power supply (for DSL, PLL) (+5V)
8	RSEL	I	This terminal designates the polarity of RF signal (H:RSEL = H L:RSEL = L)
9 } 16 17 18 19 20 21 24 25 30 34 38 39 46 48 49 53 60 62 63 64	TBUS7 } TBUS0 FLAG IPFLAG FCLK BYTCK WDCK LDG RDG PMCK X2 /CLDCK BLKCK SMCK CRC SUBC PC RESY EFM PCK PDO	—	Non connection
22	/RST	I	Reset signal input (L : Reset)
23	TX	O	Digital audio interface
26	SRDATA	O	Serial data output
27	SCK	O	Bit clock for SRDATA
28	LRCK	O	L/R distinction signal
29	XCK	O	Output of 16.9344MHz X'tal oscillation clock
31 32 35 50 59	CSEL PSEL VSS SBCK MSEL	—	Connected to GND
33	X1	I	Input of 16.9344MHz X'tal oscillation circuit
36	SUBQ	O	Sub-code Q-code output
37	SQCK	I	Clock for sub-code Q resister
40	DEMPH	O	De-emphasis ON signal (H : ON)
41	MEMP	I	Emphasis signal input
42	MLD	I	μ-com command load signal input (L : LOAD)
43	MCLK	I	μ-com command clock signal input
44	MDATA	I	μ-com command data input
45	DMUTE	I	Muting input (H : MUTE)
47	STAT	O	Status signal (CRC, CUE, CLVS, TTSTOP, FCLV, SQOK)
51	/TRON	I	Tracking servo ON signal (L : ON)
52	CLVS	O	This terminal shows the status of PLL circuit for spindle servo (H : LOCK L : ROUGHLY SERVO)
54	ECM	O	Spindle motor drive signal (Enforced output)
55	ECS	O	Spindle motor drive signal (Servo signal)
56	VDD	—	Power supply (+5V)
57	/TEST	—	Pull up (+5V)
58	SSEL	—	Pull up (+5V)
61	DO	I	Dropout signal

■ MN6650AC (IC601) : DIGITAL SERVO PROCESSER

1. Terminal Layout



2. Block Diagram



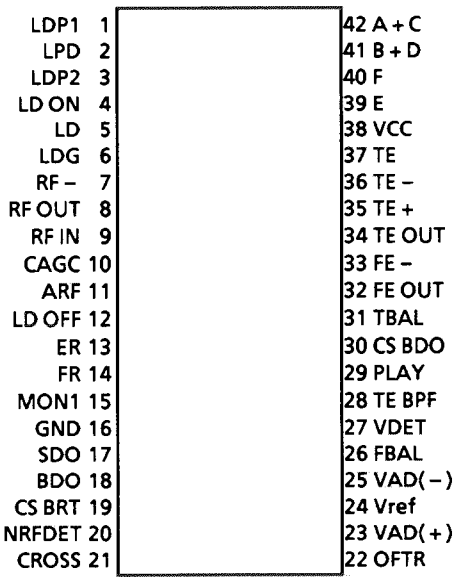
3. Description

Pin No	Symbol	I/O	Description
1	TES	O	Tracking error shunt signal
2	PLAY	O	Play signal
3	/RFDET	I	RF detect signal
4	DO	I	Dropout signal
5	OFT	I	Off track signal
6	ARF	I	RF signal input
7 35 36 37 38	WVEL T0 T1 T2 T3	—	Non connection
8	PBO	I	Buffer signal input
9	TE	I	Tracking error signal input
10	FE	I	Focus error signal input
11	VR2	I	Reference voltage for A/D (Lch)
12	VR1	I	Reference voltage for A/D (Hch)
13	LDON	O	Laser ON signal
14 15 24 39 40 41	VSS AVSS VSS T4 T5 T6	—	Connected to GND

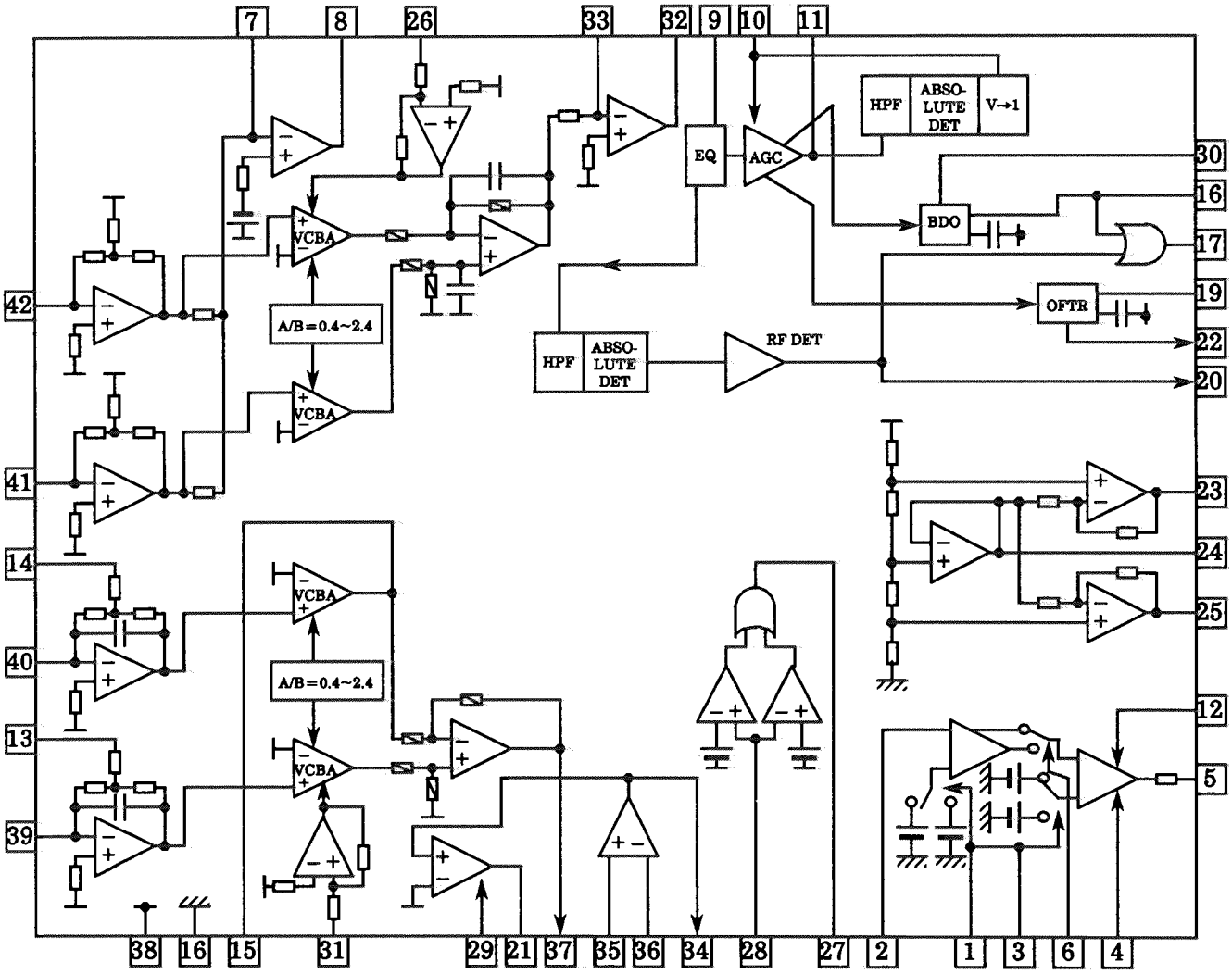
Pin No	Symbol	I/O	Description
16 17	AVDD VDD	—	Power supply
18	TRV	O	Traverse enforced output
19	TVD	O	Traverse drive output
20	FOD	O	Focus drive output
21	TRD	O	Tracking drive output
22	KICK	O	Kick pulse output
23	/TEST	I	Test mode pin
25	CLVS	I	Spindle servo status signal
26	/TRON	O	Tracking servo ON signal
27	MDATA	I	μ-com command data input
28	MCLK	I	μ-com command clock signal input
29	MLD	I	μ-com command load signal input (L : LOAD)
30	SENSE	O	Sense signal output (OFT, FESL, NACEND, NAJEND, POSAD, SFG)
31	/FLOCK	O	Focus servo an incoming signal
32	/TLOCK	O	Tracking servo an incoming signal
33	/RST	I	Reset input
34	X1	I	Input of 16.9344MHz X'tal oscillation circuit
42	VDET	I	Vibration detect signal input
43	TBAL	O	Tracking Balance adjust signal output
44	TRCRS	I	Track cross signal input

■ AN8801SC (IC501) : RF & SERVO AMP

1. Terminal Layout



2. Block Diagram

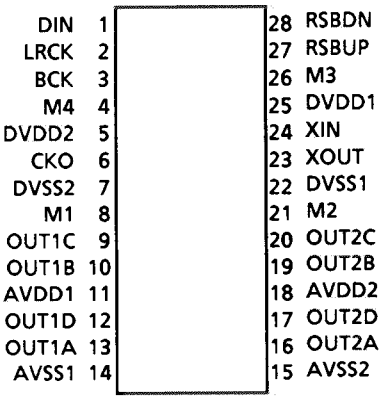


3. Description

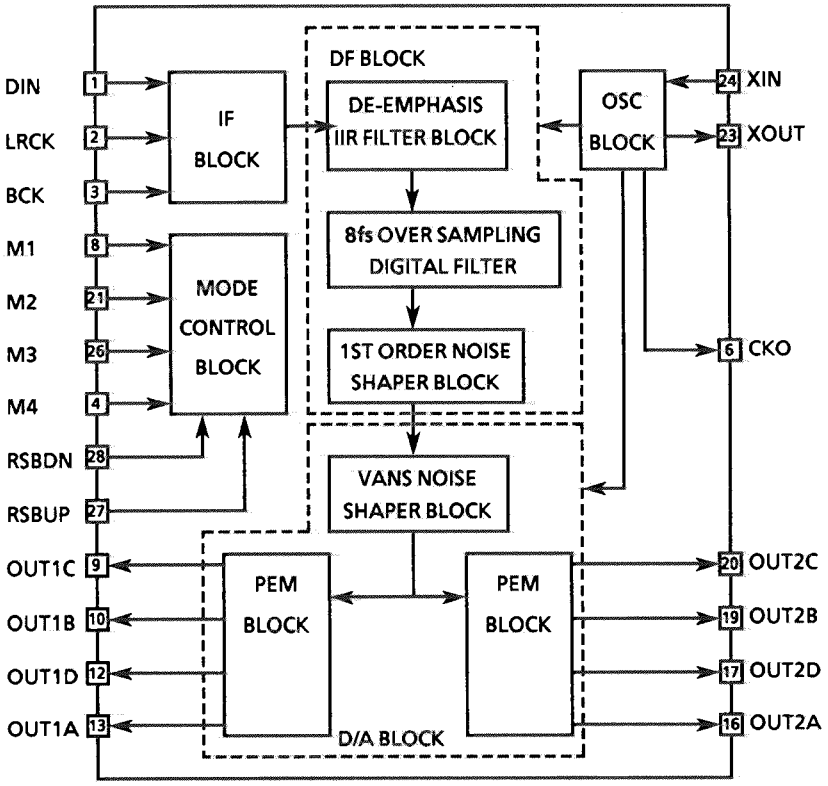
Pin No.	Symbol	I/O	Description
1 6 15	LDP1 LDG MON1	—	Non connection
2	LPD	I	APC amp input pin
3 16	LDP2 GND	—	Connected to GND
4	LD ON	I	This pin switches the Laser on/off : on for Vcc, off for ground
5	LD	O	APC amp output pin
7	RF –	I	Inverse input pin for RF amp
8	RF OUT	O	RF amp output pin
9	RF IN	I	AGC input pin
10	CAGC	I/O	Connecting pin of AGC loop filter
11	ARF	O	AGC output pin
12	LD OFF	I	Laser OFF signal control pin
13 14	ER FR	I/O	F and E I-V amp gain control pins
17	SDO	O	SDO output pin
18	BDO	O	BDO output pin
19	CS BRT	I/O	A capacitor is connected to detect the lower envelope of the RF signal
20	NRFDET	O	RF detection signal output pin
21	CROSS	O	Tracking error cross output pin
22	OFTR	O	Of-track status signal output pin
23	VAD(+)	O	VAD (+) output pin
24	Vref	O	Reference voltage output pin
25	VAD(–)	O	VAD (–) output pin
26	FBAL	I	Forcus balance control pin
27	VDET	O	Vibration detection signal output pin
28	TE BPF	I	Input pin of tracking error through BPF
29	PLAY	I	Play signal input pin
30	CS BDO	I/O	A capacitor is connected to detect the upper envelope of the RF signal
31	TBAL	I	Tracking balance control pin
32	FE OUT	O	Output pin of focus error
33	FE –	I	Inverse input pin for focus error amp
34	TE OUT	O	Tracking error signal output pin (1)
35	TE +	I	Non-inverse input pin for tracking error amp
36	TE –	I	Inverse input pin for tracking error amp
37	TE	O	Tracking error signal output pin (2)
38	Vcc	—	Power supply
39 40 41 42	E F B + D A + C	I	I-V amp input pin

■ MN35502(IC301) : D / A CONVERTER

1. Terminal Layout



2. Block Diagram

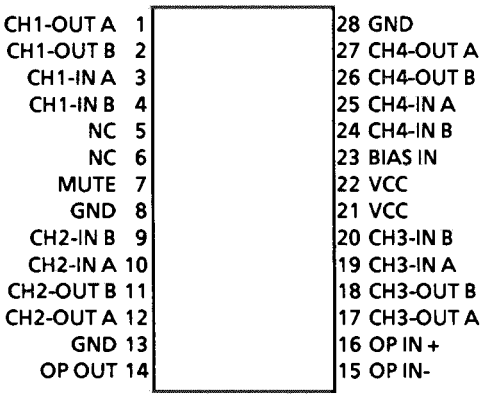


3.Description

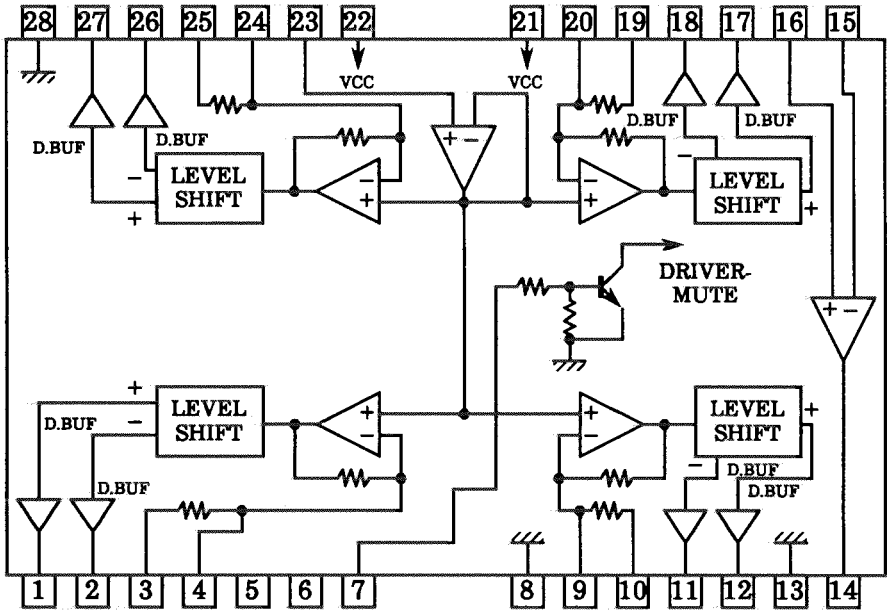
Pin No	Symbol	I/O	Description	Pin No	Symbol	I/O	Description
1	DIN	I	Data input	15	AVSS2	--	Analog ground 2
2	LRCK	I	LR clock input	16	OUT2A	O	2A PEM output
3	BCK	I	Bit clock input pin	17	OUT2D	O	2D PEM output
4	M4	I	Operational mode control 4	18	AVDD2	--	Analog power supply 2
5	DVDD2	--	Digital power supply 2	19	OUT2B	O	2B PEM output
6	CKO	I	Clock output	20	OUT2C	O	2C PEM output
7	DVSS2	--	Digital ground 2	21	M2	I	Operational mode control 2
8	M1	I	Operational mode control 1	22	DVSS1	--	Digital ground pin 1
9	OUT1C	O	1C PEM output	23	XOUT	O	Crystal oscillator output
10	OUT1B	O	1B PEM output	24	XIN	I	Crystal oscillator input
11	AVDD1	--	Analog power supply 1	25	DVDD1	--	Digital power supply 1
12	OUT1D	O	1D PEM output	26	M3	I	Operational mode control 3
13	OUT1A	O	1A PEM output	27	RSBUP	I	Reset signal / Digital Att. control signal input
14	AVSS1	--	Analog ground 1	28	RSBDN	I	Reset signal / Digital Att. control signal input

■ BA6398FP(IC801) : BTL DRIVER

1. Terminal Layout



2. Block Diagram

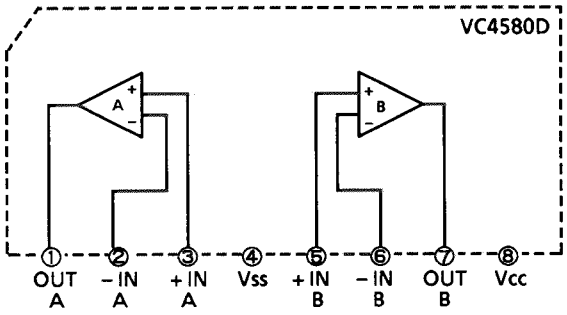


3.Description

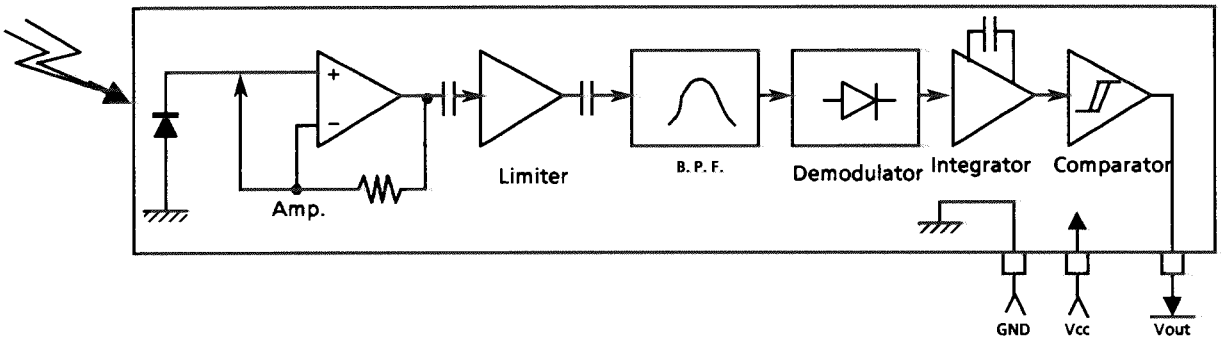
Pin No.	Symbol	I/O	Description
1 2	CH1-OUT A CH1-OUT B	O	Focus drive output
3 5,6 10 19 25	CH1-IN A NC CH2-IN A CH3-IN A CH4-IN A	—	Non connection
4 9 20 24	CH1-IN B CH2-IN B CH3-IN B CH4-IN B	I	Input pin of Gain adjustment
7	MUTE	I	Mute signal input pin
8,13,28	GND	—	GND
11 12	CH2-OUT B CH2-OUT A	O	Spindle motor drive output
14	OP OUT	O	OP amp output
15,16	OP IN	I	OP amp input
17 18	CH3-OUT A CH3-OUT B	O	Feed motor output
21,22	Vcc	—	Power supply
23	BIAS IN	I	Input pin of Bias
26 27	CH4-OUT B CH4-OUT A	O	Tracking drive output

Internal Block Diagram of Other ICs

■ VC4580D (IC302,303,304,305,352) : Dual OP Amp.

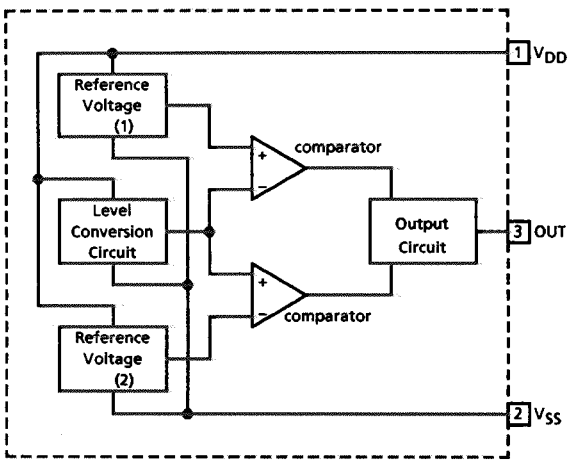


■ GP1U571X (IC203) : Receiver for remote controller



■ MN1281(P,Q) (IC202) : Reset IC

Block Diagram

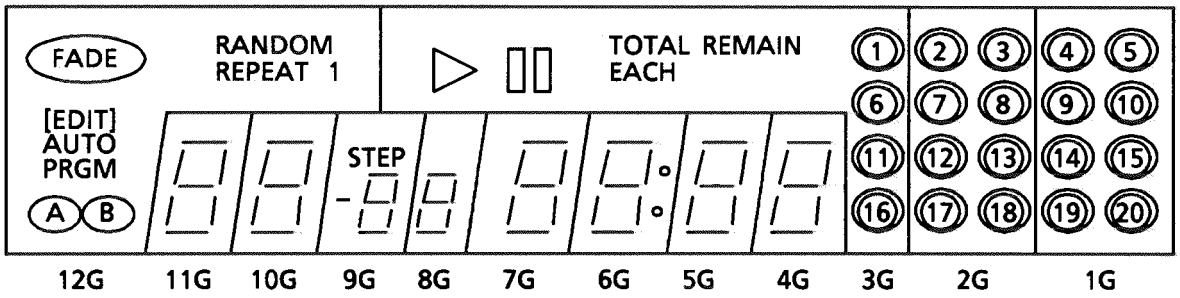


Pin No.	Symbol	Description
1	V_{DD}	Power supply
2	V_{SS}	Ground
3	OUT	Reset signal output : Low level is output when resetting : High level is output when cancelling the reset.

Internal Connections for the FL Display Tube

■ ELU0001-178:(FL201)

1. Grid Layout



2. Pin Connections

TERMINAL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
ELECTRODE	F1	F1	NP	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	NP	NP	NP

TERMINAL NO.	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
ELECTORODE	NP	NP	NP	NP	NP	NP	NP	S1	S2	S3	S4	S5	S6	S7	S8	S9	NP	F2	F2

(Note) F : Filament G : Grid NP : NoPin NC : No Connection P1~P9 : Anode

3. Anode Connection Table

	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
S1	FADE	a	a	a	a	a	a	a	a	(1)	(2)	(4)
S2	[EDIT]	b	b	b	b	b	b	b	b	(6)	(7)	(9)
S3	AUTO	c	c	c	c	c	c	c	c	(11)	(12)	(14)
S4	PRGM	d	d	d	d	d	d	d	d	(16)	(17)	(19)
S5	A	e	e	e	e	e	e	e	e	▶	(3)	(5)
S6	B	f	f	f	f	f	f	f	f	▮▮	(8)	(10)
S7	RANDOM	g	g	g	g	g	g	g	g	TOTAL	(13)	(15)
S8	REPEAT	—	—	STEP	—	—	° °	—	—	EACH	(18)	(20)
S9	1	—	—	(−)	—	—	—	—	—	REMAIN	—	—

Disassembly Procedures

(1) Top cover removal
1. Remove 4 screws Ⓐon the top side of the top cover.

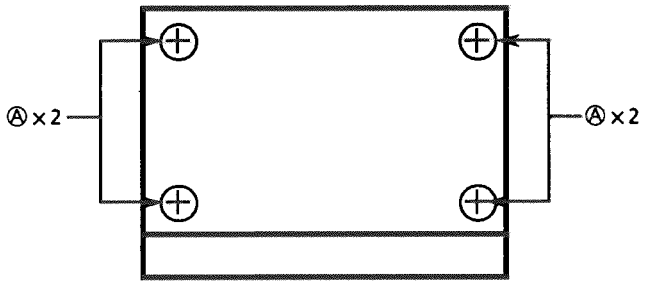


Fig1 Top view

(2) Top cover removal
1. Remove the 4 screws Ⓑ and two screws Ⓑ′ .
2. Remove the top cover.

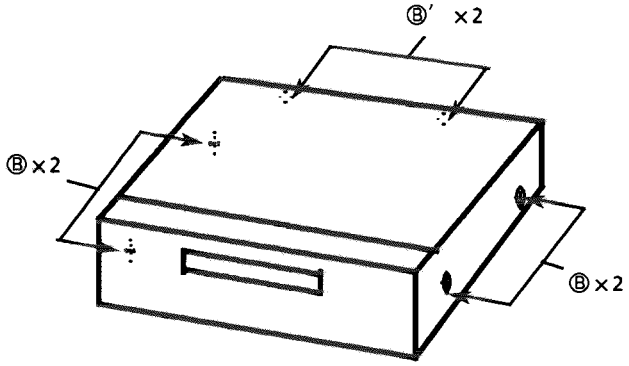


Fig2 Rear view

(3) Rear panel removal
1. Remove the top cover.
2. Remove the 6 screws Ⓒ and Ⓒ′ .
3. Remove the rear panel.

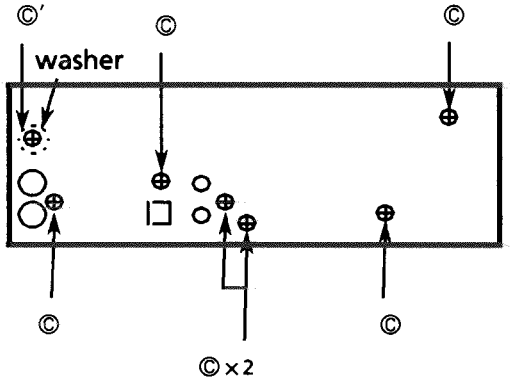


Fig 3 Rear side view

(4) Tray ass'y removal.
1. Remove the top cover.
2. Remove the screw Ⓓ on the tray.
3. Turn of the power .Press the OPEN/CLOSE switch to move the tray out and the power off
4. Pull the tray toward the front to move it.

Note: If the power can not be tuned on due to a malfunction, rtc, insert a Philips screwdriver through the hole on the bottom and turn it clochwise to move the tray out.

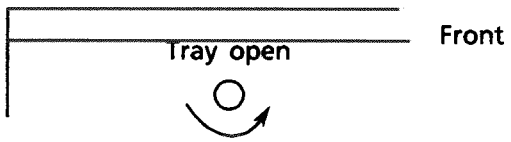
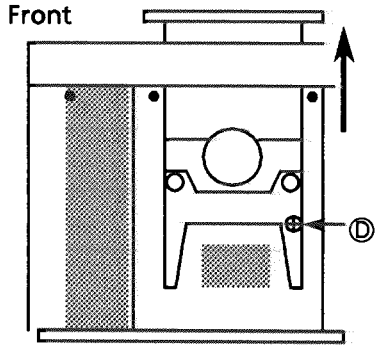


Fig 4 Bottom view



Rear

Fig 5 Top view

(5) Front panel assembly removal
1. Remove the top cover.
2. Remove the tray ass'y.
3. Remove the 2 screws Ⓔ.
4. Remove the 2 screws Ⓕand Ⓕ′ .
5. Disconnect the connectors J601, P352.
6. Remove the front panel ass'y.

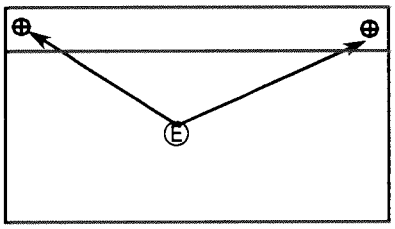


Fig 6 Top view

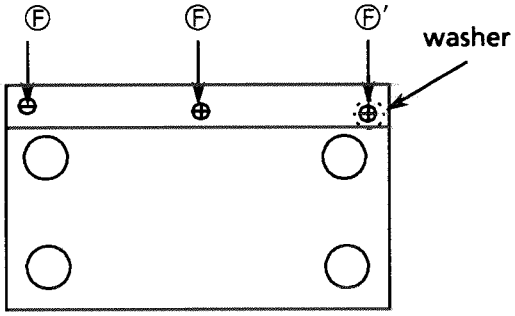


Fig 6 Bottom view

(6) CD mechanism assembly removal
1. Remove the top cover.
2. Remove the tray ass'y.
3. Remove the 2screws ⒼHolding the clamp assembly, then remove the clamp assembly.
4. Remove the 4 screws Ⓗand Ⓘ holding the mechanism assembly and main PCB.
5. Disconnect the connectors P501, P801,P802
6. Remove the CD mechanism assembly.

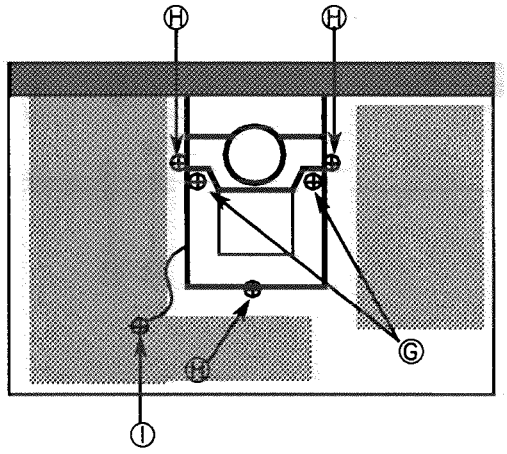


Fig 7 CD Mechanism Top view

(7) Main PCB(ENN-407-1) removal
1. Remove the top cover.
2. Remove the rear panel.
3. Disconnect the connectors P501,P801,P802 and J601,P352,P102,P101
4. Remove the 4 screws Ⓙand 2screws Ⓙ′ holding the Main PCB.
5. Remove the Main PCB.

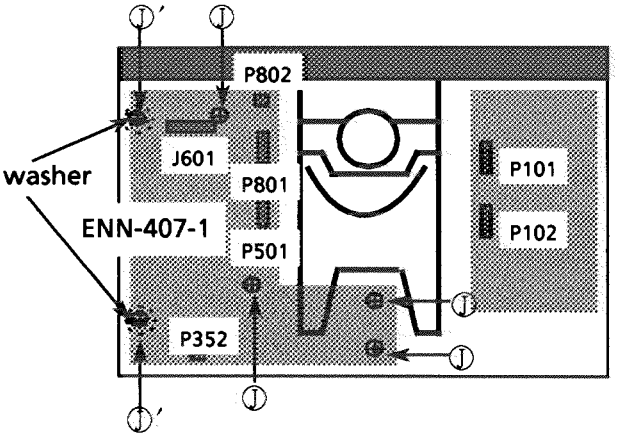


Fig 8 Main PCB Top view

(8) Power PCB(ENN-407-2) removal
1. Remove the top cover.
2. Disconnect the connectors P101,P102,P901.
3. Remove the screws Ⓚ and Ⓚ′ holding the Power PCB.
4. Remove the 2 screws Ⓛ .
5. Turn on the Power PCB.

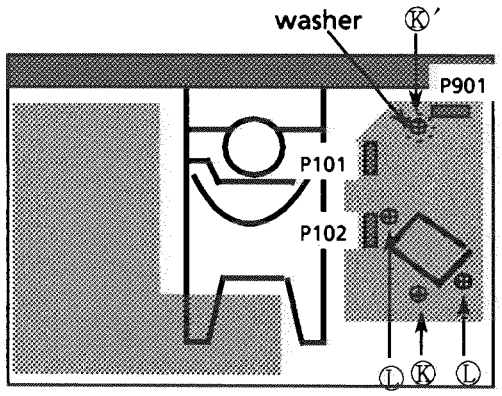


Fig 9 Power PCB Top view

(9) Front PCB removal

1. Remove the top cover.
2. Remove the tray ass'y.
3. Remove Front Panel.
4. Disconnect the connectors P901 J601, and P352.
5. Remove the 7screws Ⓜ and 4 screws Ⓝ.
6. Remove Front PCB .

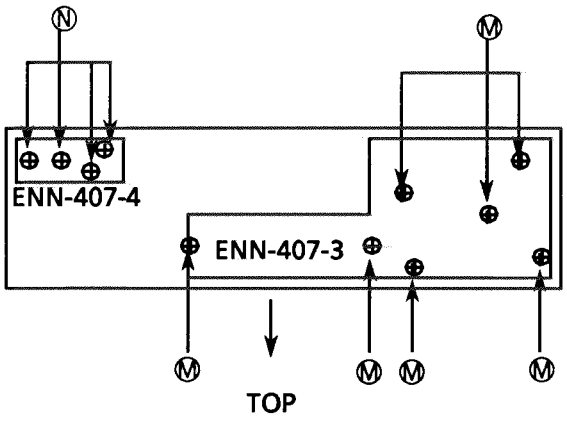


Fig 10 Front PCB view

(10) Set the tray assembly

1. When installing tray assemblly , set the mechanism down state (after of the tray removel position).
2. Insert the tray assembly.
3. Install the the screw Ⓞ.

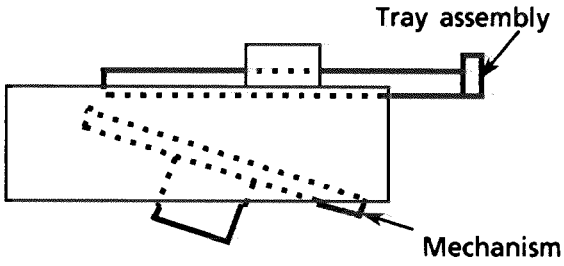


Fig 11 Mechanism down state

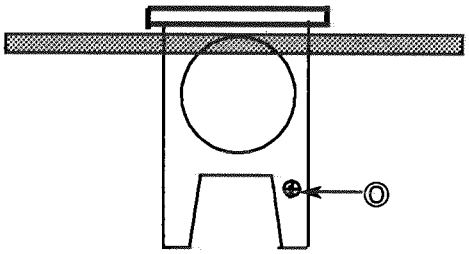


Fig 12 Tray assembly Top view

Disassemble of the CD mechanism assembly

(1) Pickup removal
1. Remove the cd mechanism assembly.
2. Release the shaft to remove the pickup (Fig 13).

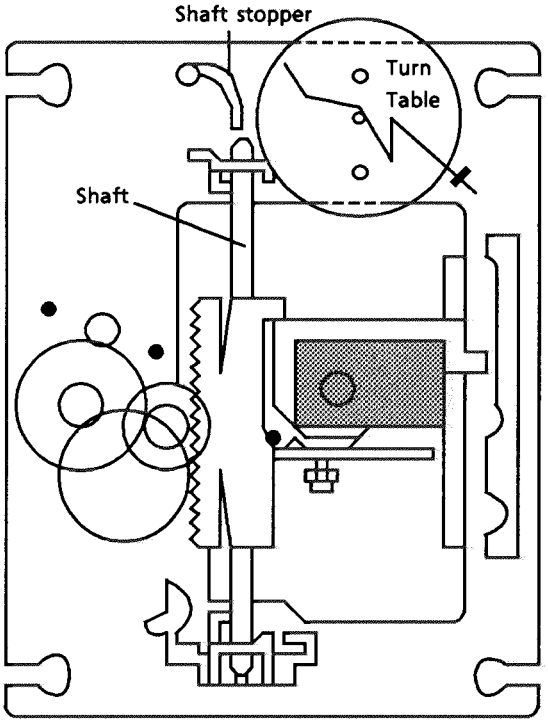


Fig 13 CD mechanism assembly

(2) Spindle motor removal
1. Remove the cd mechanism assembly.
2. Remove the turntable, and remove the two screws retaining the spindle motor.
3. Remove the screws retaining the spindle and feed motor P.C. Board and unsolder it.

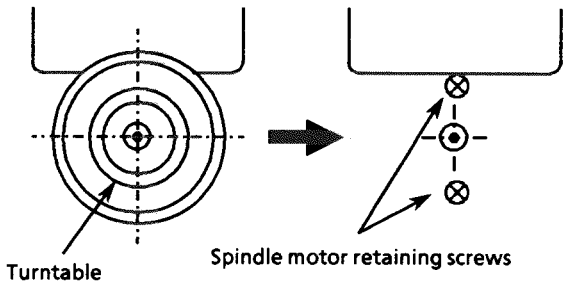


Fig 14

(3) Spindle motor installation
1. Tighten the 2 screws to the same torque.
2. Fasten the spindle and feed motor P.C. board with the screw and solder.
3. Install the turntable.When installing, press straight down at the center of the turntable until the distance from the surface of the mechanism base to the turntable is exactly 19.4±0.1mm.

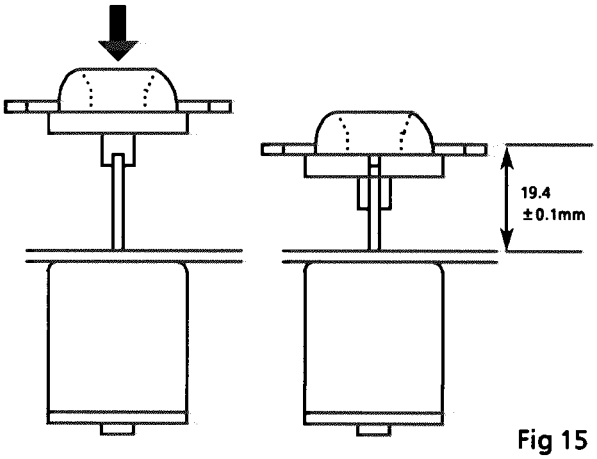


Fig 15

(4) After inserting the turntable, bond the motor shaft and turntable together (at the section marked by an arrow in fig 16 on the left below).

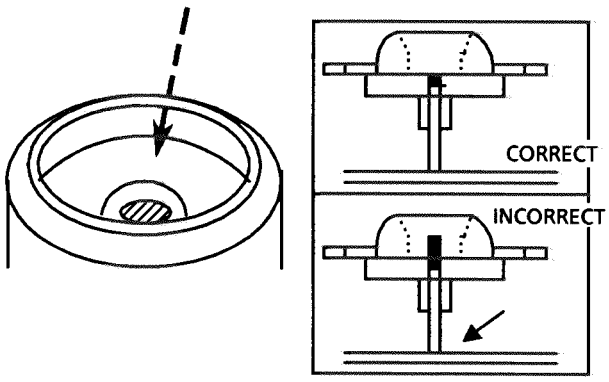
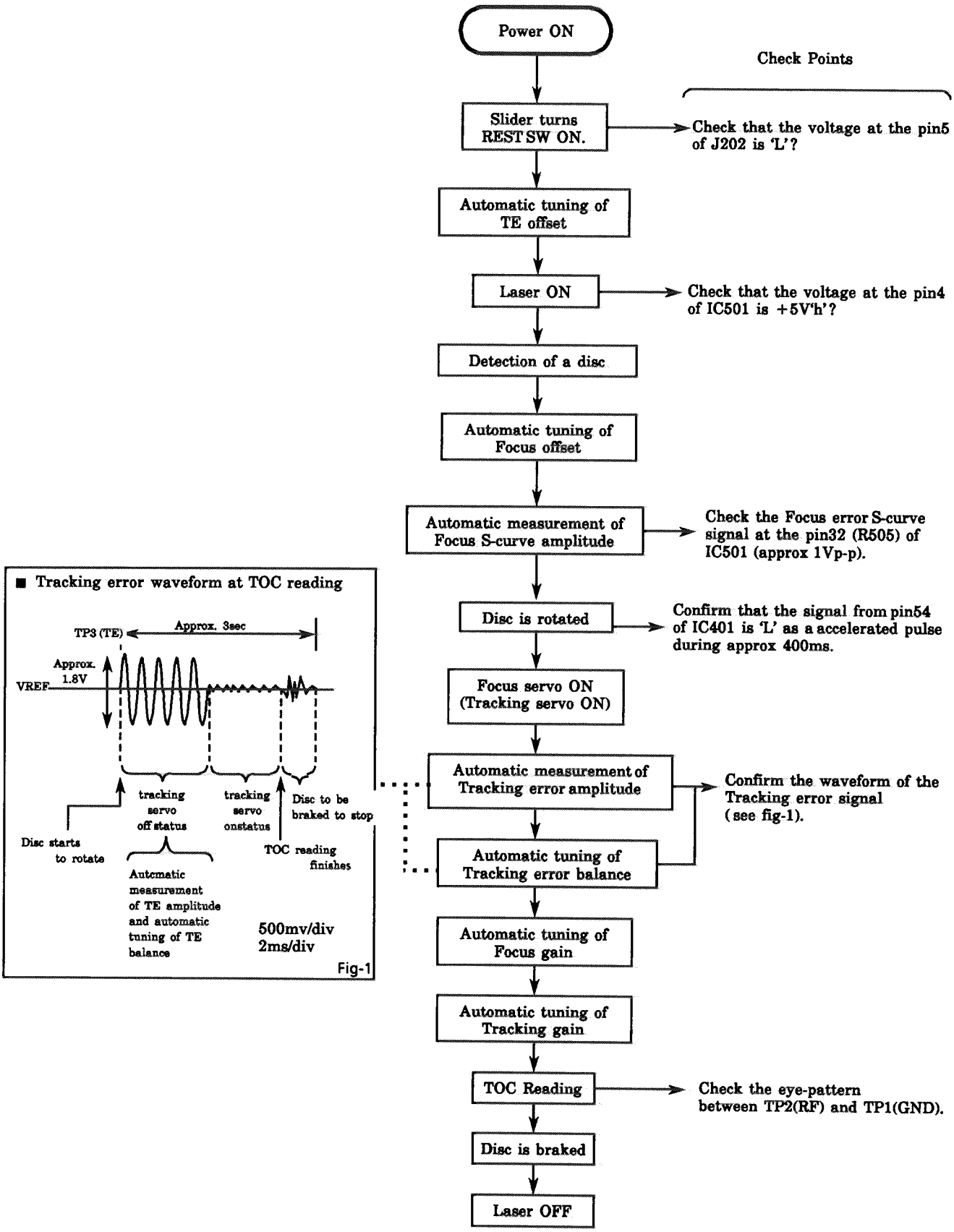


Fig 16

(5) Use "LOCKTITE" #460 bonding agent, and apply as little as possible. Take care not to allow any excess bonding agent to get onto the turntable. Be extremely careful not to allow bonding agent to adhere to the motor bearings (the section marked by an allow in fig 16 on the right).

Flow of Functional Operation Until TOC is Read

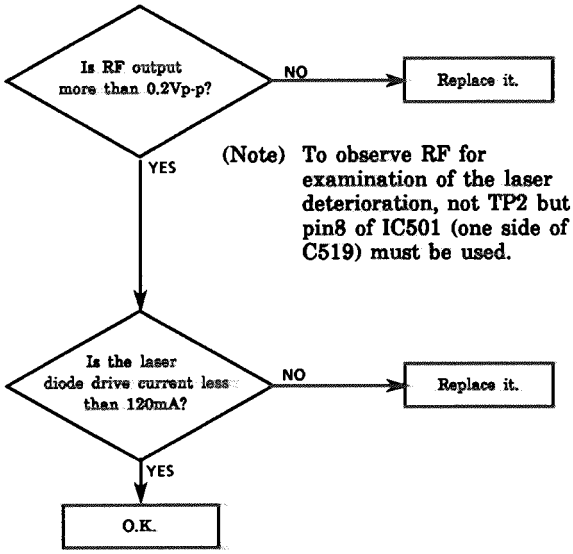

Power ON
Check Points
Slider turns REST SW ON.
Check that the voltage at the pin5 of J202 is 'L'?
Automatic tuning of TE offset
Laser ON
Check that the voltage at the pin4 of IC501 is +5V'h'?
Detection of a disc
Automatic tuning of Focus offset
Automatic measurement of Focus S-curve amplitude
Check the Focus error S-curve signal at the pin32 (R505) of IC501 (approx 1Vp-p).
Disc is rotated
Confirm that the signal from pin54 of IC401 is 'L' as a accelerated pulse during approx 400ms.
Focus servo ON (Tracking servo ON)
Automatic measurement of Tracking error amplitude
Confirm the waveform of the Tracking error signal (see fig-1).
Automatic tuning of Tracking error balance
Automatic tuning of Focus gain
Automatic tuning of Tracking gain
TOC Reading
Check the eye-pattern between TP2(RF) and TP1(GND).
Disc is braked
Laser OFF
■ Tracking error waveform at TOC reading
TP3 (TE)
Approx. 3sec
Approx. 1.8V
VREF
tracking servo off status
tracking servo onstatus
Disc to be braked to stop
Disc starts to rotate
TOC reading finishes
Autcmatic measurement of TE amplitude and automatic tuning of TE balance
500mv/div
2ms/div
Fig-1

Maintenance of Laser Pickup

(1) Life of the laser diode

When the life of the laser diode has expired, the following symptoms will appear.

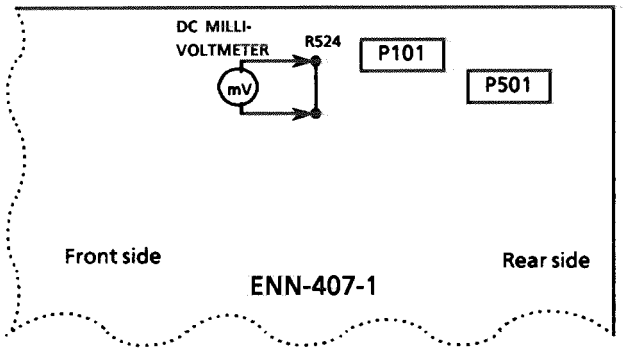
1. The level of RF output (EFM output: amplitude of eye pattern) will be low.
2. The drive current required by the laser diode will be increased.
   In such a case, check the life of the laser diode following the flowchart below



(Note) To observe RF for examination of the laser deterioration, not TP2 but pin8 of IC501 (one side of C519) must be used.

(2) Measurement of laser diode drive current

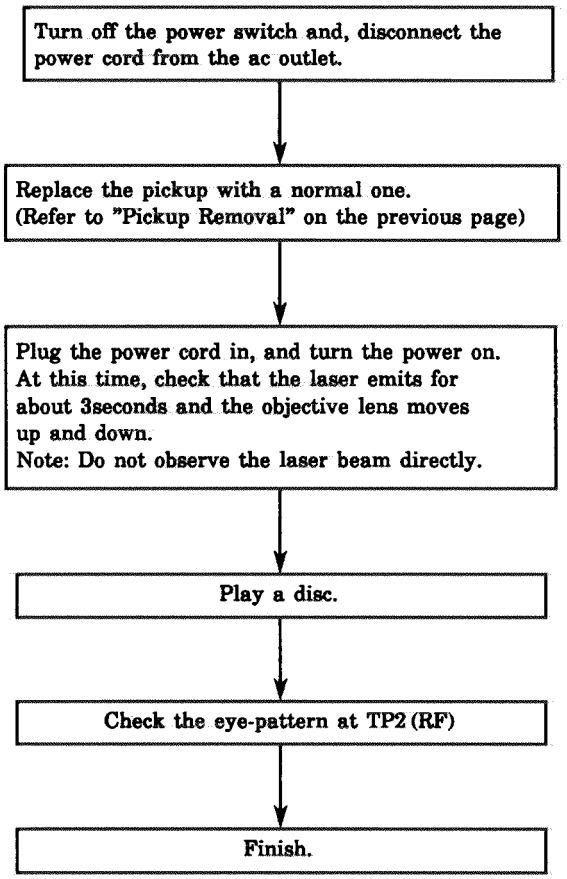
The voltage of the both sides of R524 must be less than 1.88V by measurement with a voltmeter.



(3) Semi-fixed resistor on the APC PC board

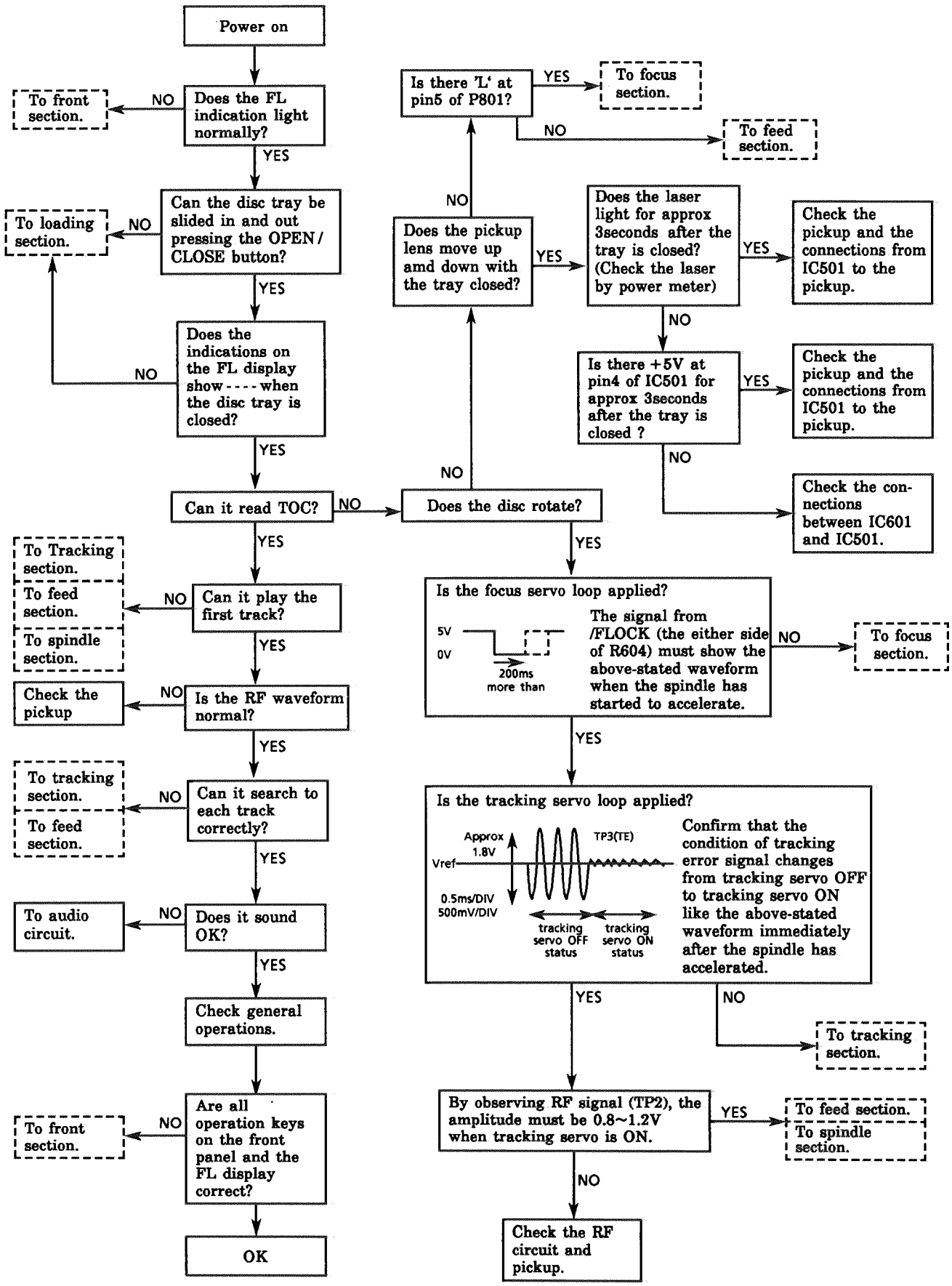
The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power. Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.
If the laser power is lower than the specified value, the laser diode is almost worn out, and the laser pickup should be replaced.
If the semi-fixed resistor is adjusted while the pickup is functioning normally, the laser pickup may be damaged due to excessive current.

Replacement of Laser Pickup

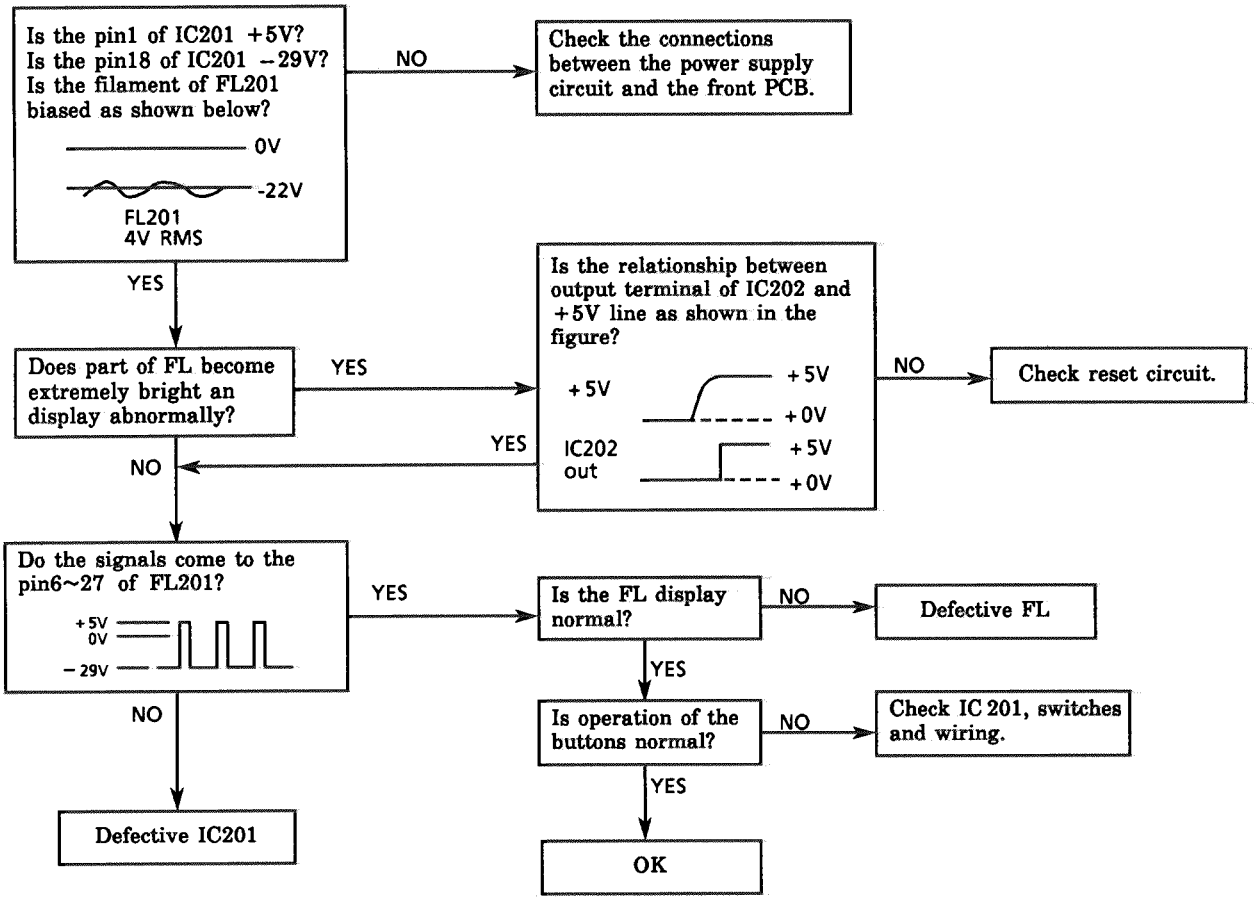

Turn off the power switch and, disconnect the power cord from the ac outlet.
Replace the pickup with a normal one.
(Refer to "Pickup Removal" on the previous page)
Plug the power cord in, and turn the power on.
At this time, check that the laser emits for about 3seconds and the objective lens moves up and down.
Note: Do not observe the laser beam directly.
Play a disc.
Check the eye-pattern at TP2 (RF)
Finish.

Troubleshooting

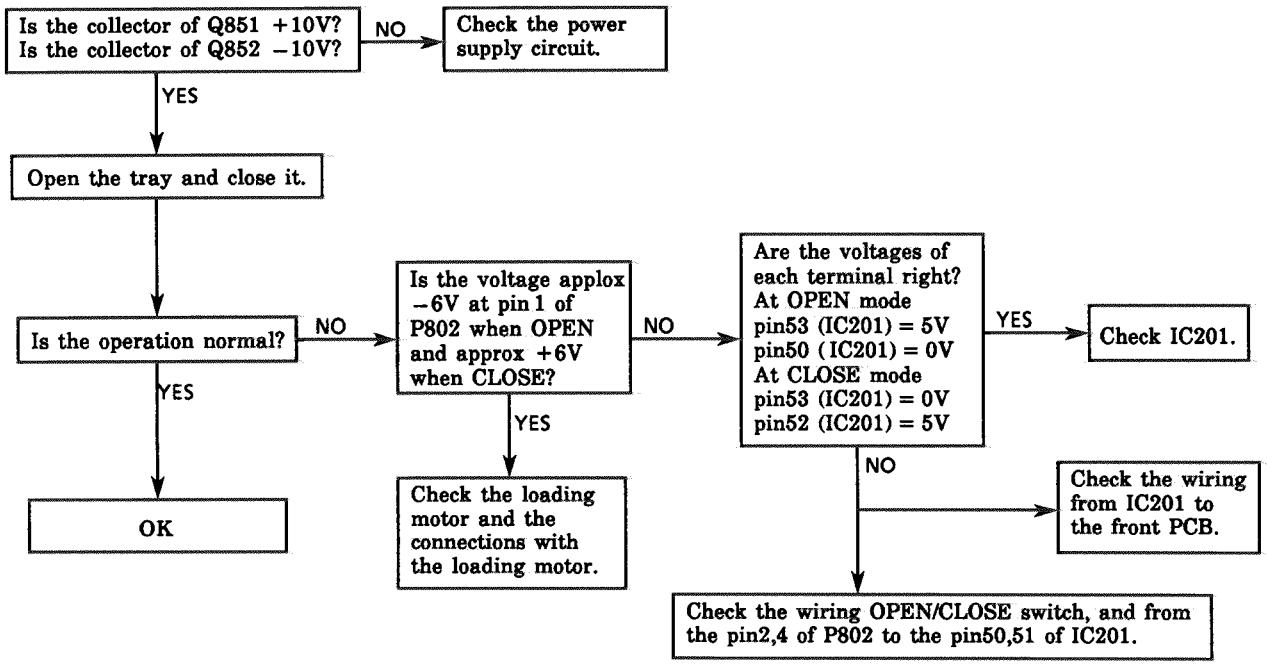
The following shows the status of the various circuits from turning on the power to the start of disc play.


Power on
Does the FL indication light normally?
NO
To front section.
YES
Can the disc tray be slided in and out pressing the OPEN/CLOSE button?
NO
To loading section.
YES
Does the indications on the FL display show - - - - when the disc tray is closed?
NO
YES
Can it read TOC?
NO
Does the disc rotate?
NO
YES
Is there 'L' at pin5 of P801?
YES
To focus section.
NO
To feed section.
Does the pickup lens move up amd down with the tray closed?
YES
NO
Does the laser light for approx 3seconds after the tray is closed? (Check the laser by power meter)
YES
Check the pickup and the connections from IC501 to the pickup.
NO
Is there +5V at pin4 of IC501 for approx 3seconds after the tray is closed ?
YES
Check the pickup and the connections from IC501 to the pickup.
NO
Check the connections between IC601 and IC501.
Is the focus servo loop applied?
5V
0V
200ms more than
The signal from /FLOCK (the either side of R604) must show the above-stated waveform when the spindle has started to accelerate.
NO
To focus section.
YES
Is the tracking servo loop applied?
Approx 1.8V
Vref
TP3(TE)
0.5ms/DIV
500mV/DIV
tracking servo OFF status
tracking servo ON status
Confirm that the condition of tracking error signal changes from tracking servo OFF to tracking servo ON like the above-stated waveform immediately after the spindle has accelerated.
YES
NO
To tracking section.
By observing RF signal (TP2), the amplitude must be 0.8~1.2V when tracking servo is ON.
YES
To feed section.
To spindle section.
NO
Check the RF circuit and pickup.
To Tracking section.
To feed section.
To spindle section.
NO
Can it play the first track?
YES
Check the pickup
NO
Is the RF waveform normal?
YES
To tracking section.
To feed section.
NO
Can it search to each track correctly?
YES
To audio circuit.
NO
Does it sound OK?
YES
Check general operations.
To front section.
NO
Are all operation keys on the front panel and the FL display correct?
OK

Front Section

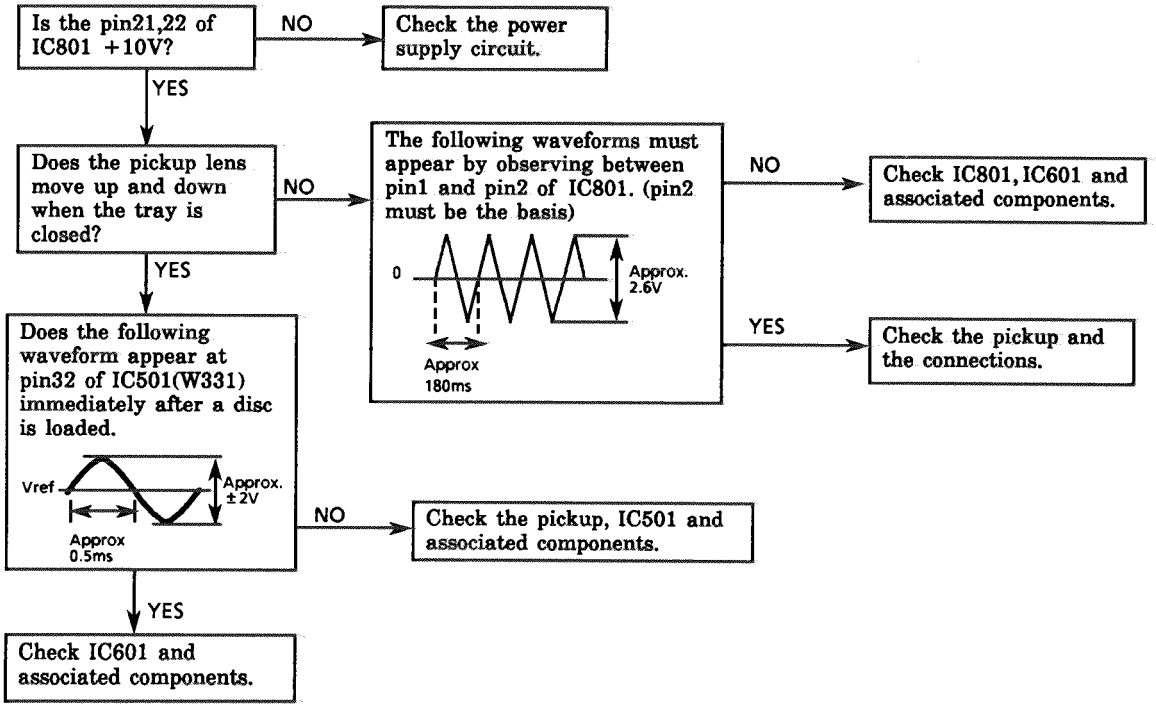


Loading section

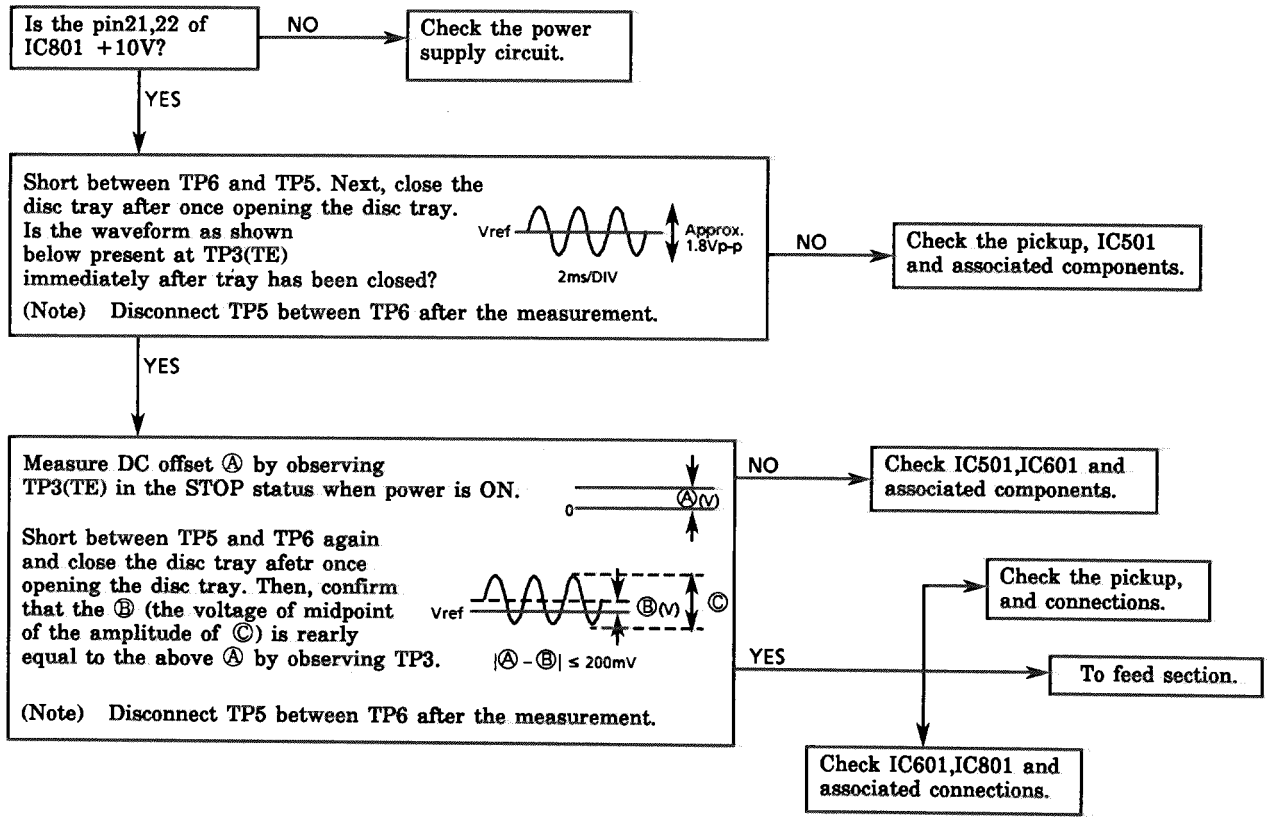

Is the collector of Q851 +10V?
Is the collector of Q852 −10V?
NO
Check the power supply circuit.
YES
Open the tray and close it.
Is the operation normal?
NO
Is the voltage applox −6V at pin 1 of P802 when OPEN and approx +6V when CLOSE?
NO
Are the voltages of each terminal right?
At OPEN mode
pin53 (IC201) = 5V
pin50 (IC201) = 0V
At CLOSE mode
pin53 (IC201) = 0V
pin52 (IC201) = 5V
YES
Check IC201.
YES
OK
YES
Check the loading motor and the connections with the loading motor.
NO
Check the wiring from IC201 to the front PCB.
Check the wiring OPEN/CLOSE switch, and from the pin2,4 of P802 to the pin50,51 of IC201.

Focus section

Note) When checking the voltages between pin1 and pin2 of IC801 with an oscilloscope, do not connect the other probes.

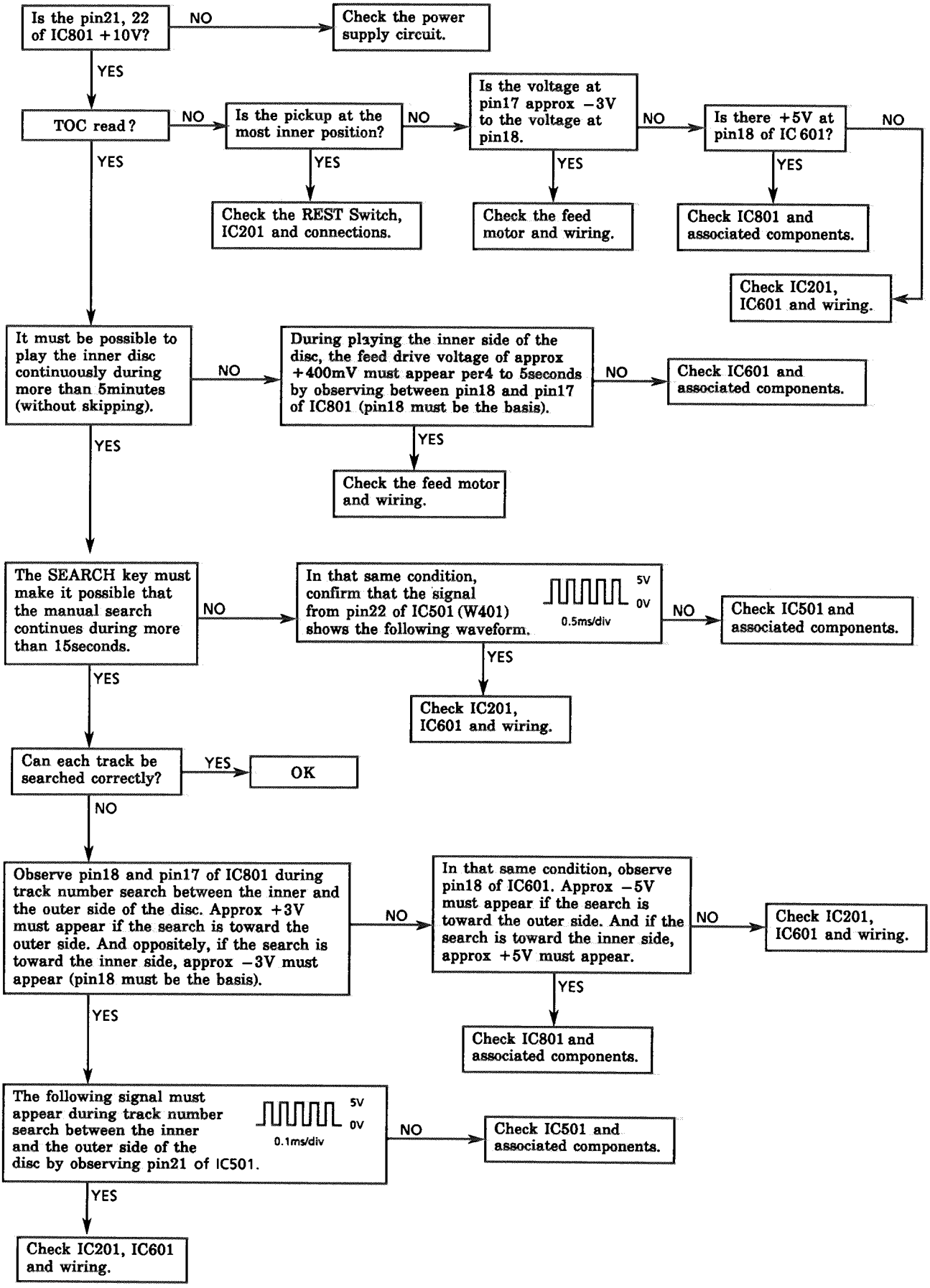

Is the pin21,22 of IC801 +10V?
NO
Check the power supply circuit.
YES
Does the pickup lens move up and down when the tray is closed?
NO
The following waveforms must appear by observing between pin1 and pin2 of IC801. (pin2 must be the basis)
0
Approx. 2.6V
Approx 180ms
NO
Check IC801, IC601 and associated components.
YES
Check the pickup and the connections.
YES
Does the following waveform appear at pin32 of IC501(W331) immediately after a disc is loaded.
Vref
Approx. ±2V
Approx 0.5ms
NO
Check the pickup, IC501 and associated components.
YES
Check IC601 and associated components.

Tracking section


Is the pin21,22 of IC801 +10V?
NO
Check the power supply circuit.
YES
Short between TP6 and TP5. Next, close the disc tray after once opening the disc tray. Is the waveform as shown below present at TP3(TE) immediately after tray has been closed?
Vref
Approx. 1.8Vp-p
2ms/DIV
(Note) Disconnect TP5 between TP6 after the measurement.
NO
Check the pickup, IC501 and associated components.
YES
Measure DC offset Ⓐ by observing TP3(TE) in the STOP status when power is ON.
0
Ⓐ(V)
NO
Check IC501,IC601 and associated components.
Short between TP5 and TP6 again and close the disc tray afetr once opening the disc tray. Then, confirm that the Ⓑ (the voltage of midpoint of the amplitude of Ⓒ) is rearly equal to the above Ⓐ by observing TP3.
Vref
Ⓑ(V)
Ⓒ
|Ⓐ - Ⓑ| ≤ 200mV
Check the pickup, and connections.
YES
To feed section.
(Note) Disconnect TP5 between TP6 after the measurement.
Check IC601,IC801 and associated connections.

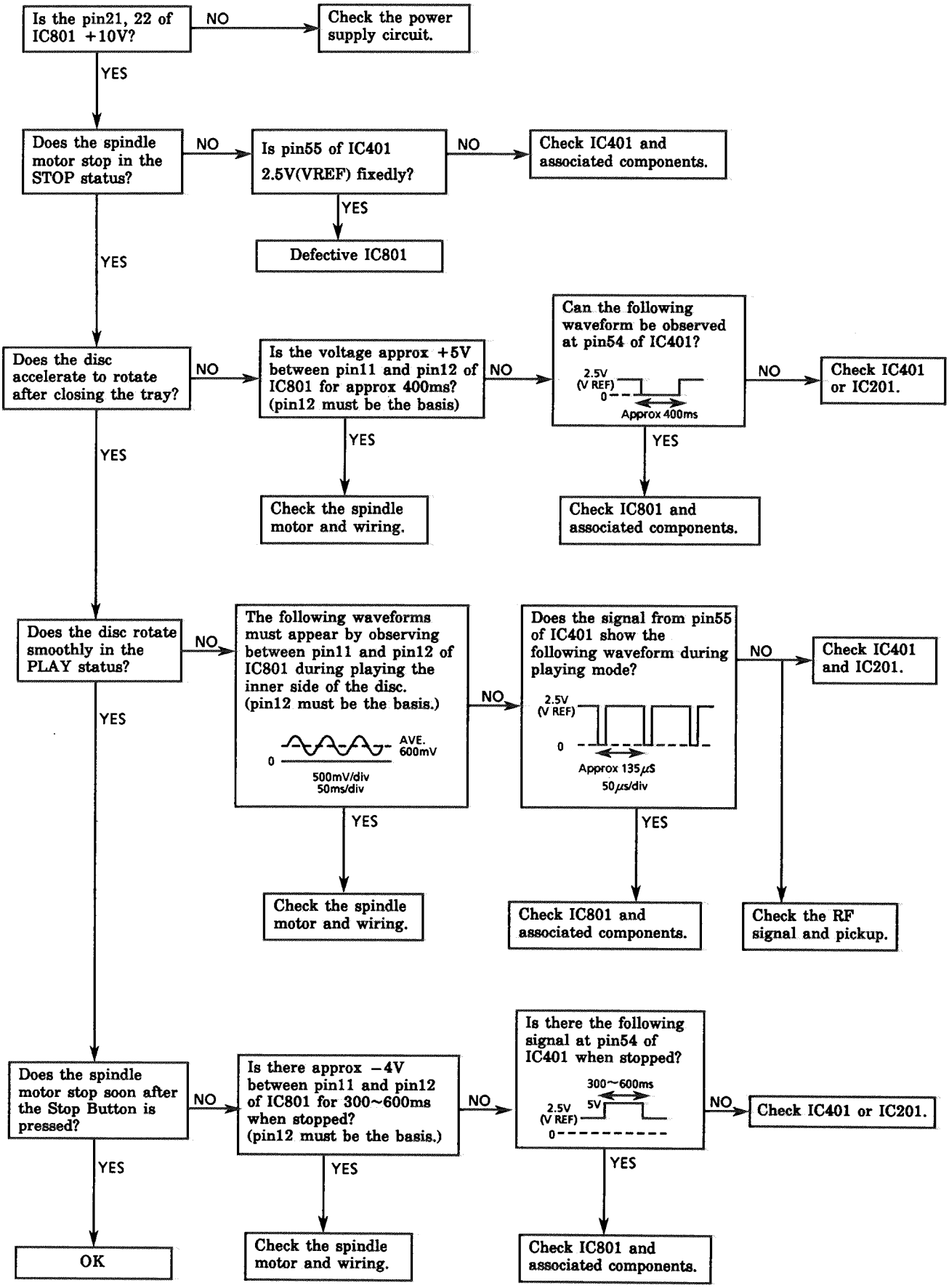
Feed section

Note) When checking the voltages between pin18 and pin17 of IC801 with an oscilloscope, do not connect the other probes.

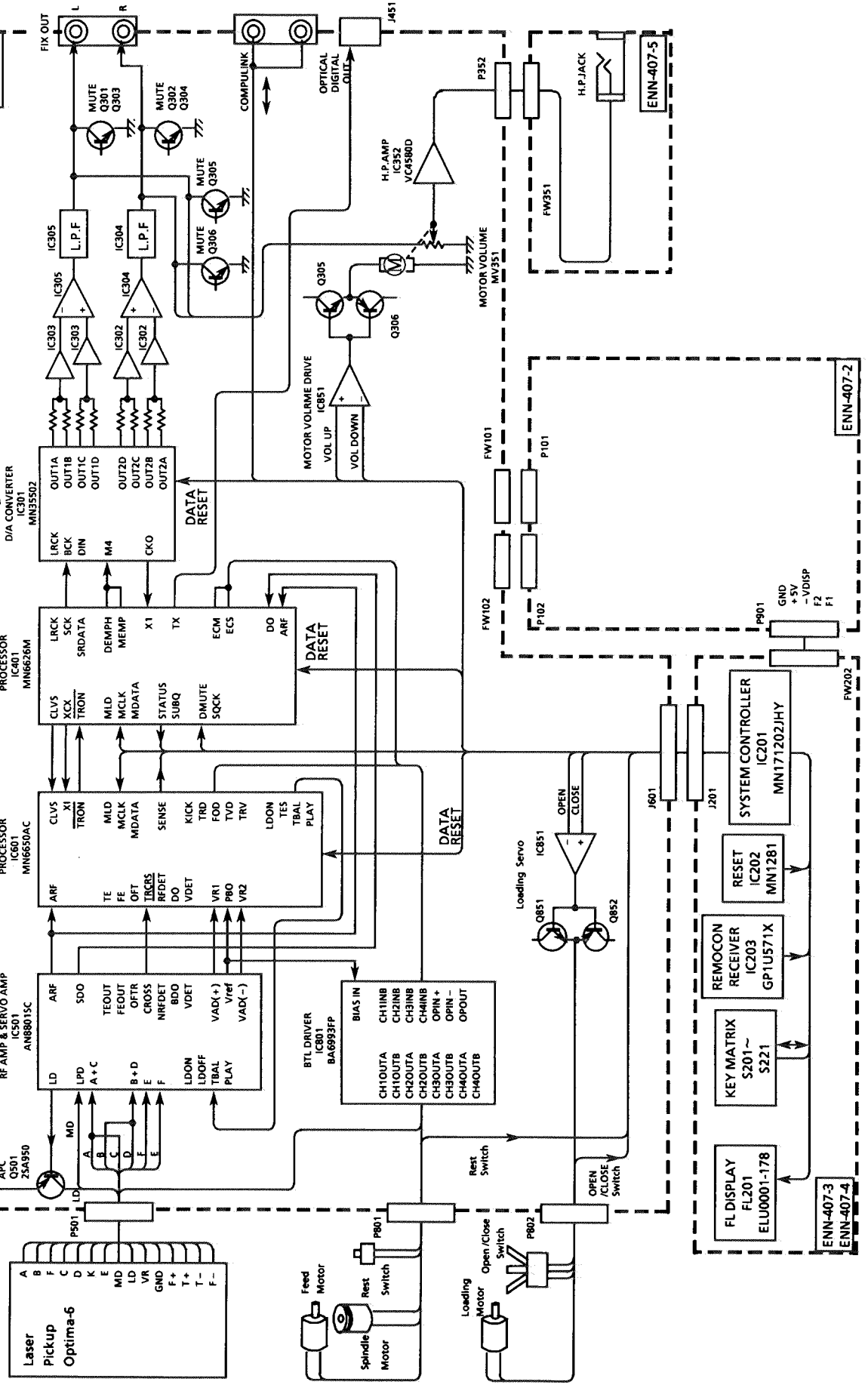

Is the pin21, 22 of IC801 +10V?
NO
Check the power supply circuit.
YES
TOC read?
NO
Is the pickup at the most inner position?
NO
Is the voltage at pin17 approx −3V to the voltage at pin18.
NO
Is there +5V at pin18 of IC601?
NO
YES
Check the REST Switch, IC201 and connections.
Check the feed motor and wiring.
Check IC801 and associated components.
Check IC201, IC601 and wiring.
It must be possible to play the inner disc continuously during more than 5minutes (without skipping).
NO
During playing the inner side of the disc, the feed drive voltage of approx +400mV must appear per4 to 5seconds by observing between pin18 and pin17 of IC801 (pin18 must be the basis).
NO
Check IC601 and associated components.
Check the feed motor and wiring.
The SEARCH key must make it possible that the manual search continues during more than 15seconds.
NO
In that same condition, confirm that the signal from pin22 of IC501 (W401) shows the following waveform.
5V
0V
0.5ms/div
NO
Check IC501 and associated components.
Check IC201, IC601 and wiring.
Can each track be searched correctly?
YES
OK
Observe pin18 and pin17 of IC801 during track number search between the inner and the outer side of the disc. Approx +3V must appear if the search is toward the outer side. And oppositely, if the search is toward the inner side, approx −3V must appear (pin18 must be the basis).
NO
In that same condition, observe pin18 of IC601. Approx −5V must appear if the search is toward the outer side. And if the search is toward the inner side, approx +5V must appear.
NO
Check IC201, IC601 and wiring.
Check IC801 and associated components.
The following signal must appear during track number search between the inner and the outer side of the disc by observing pin21 of IC501.
5V
0V
0.1ms/div
NO
Check IC501 and associated components.
Check IC201, IC601 and wiring.

Spindle section

Note) When checking the voltages between pin11 and pin12 of IC801 with an oscilloscope, do not connect the other probes.



Block Diagram

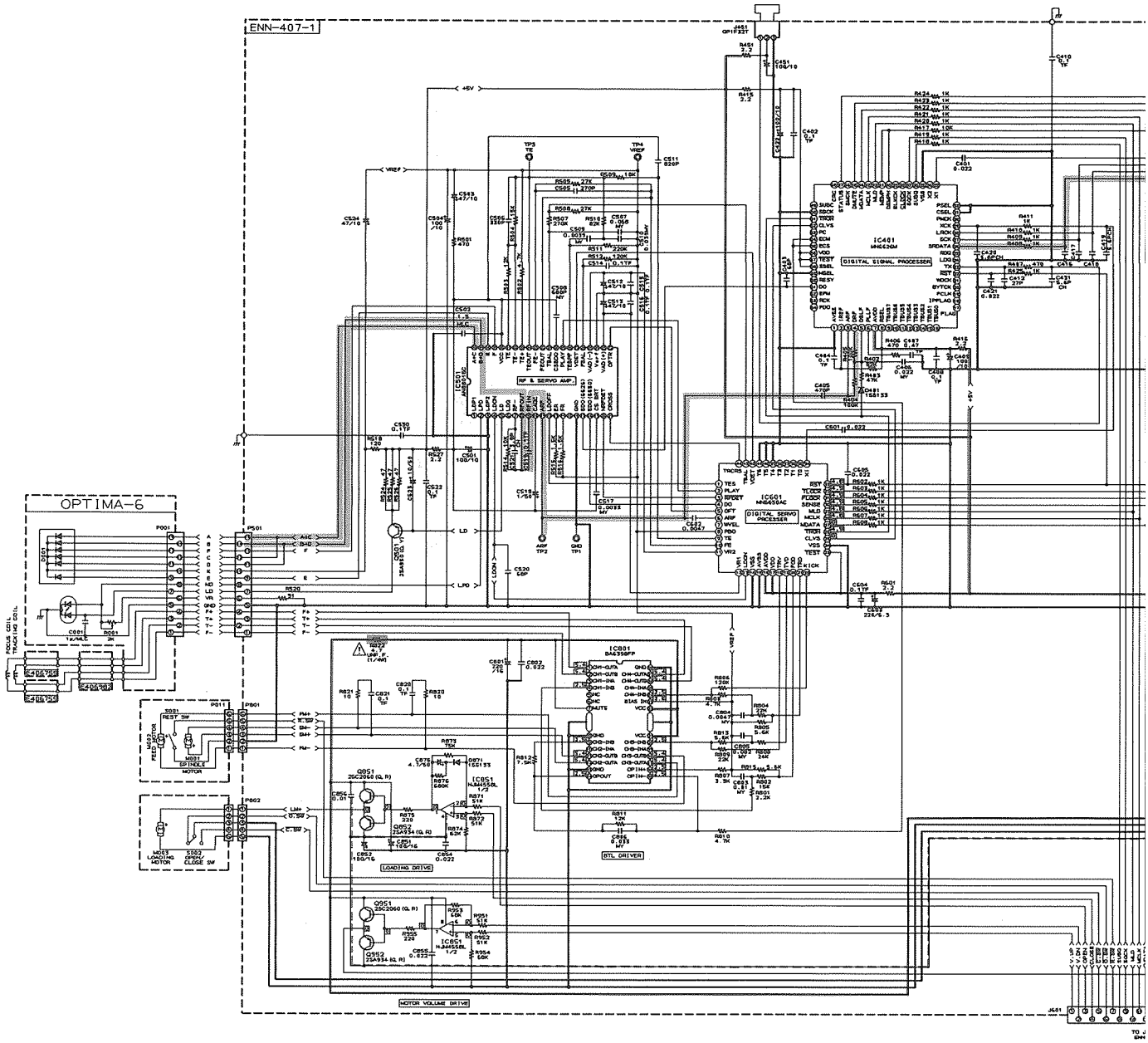


—— MEMO ——

MEMO

Schematic Diagrams

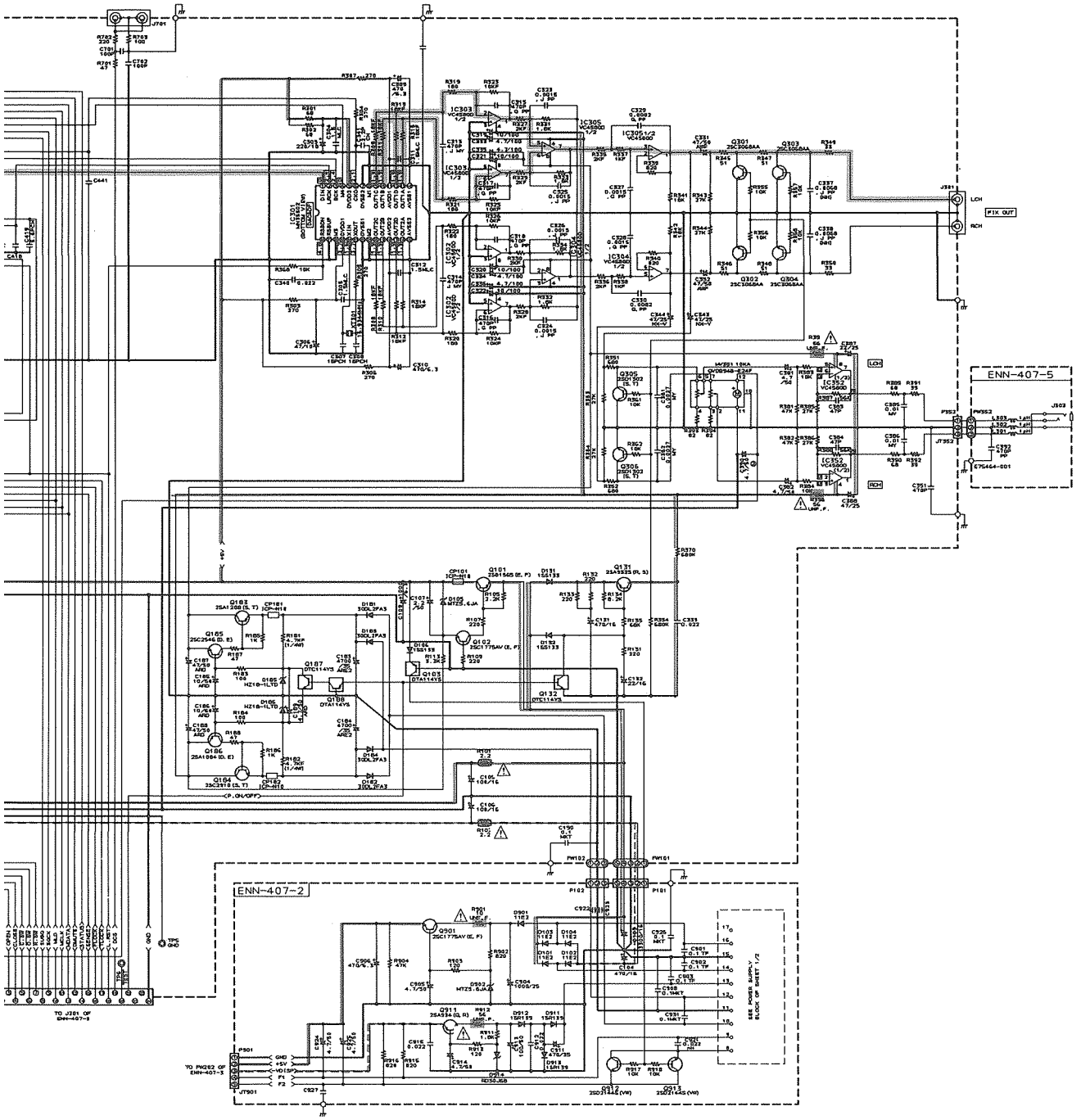
(1) Servo & Power Supply Section



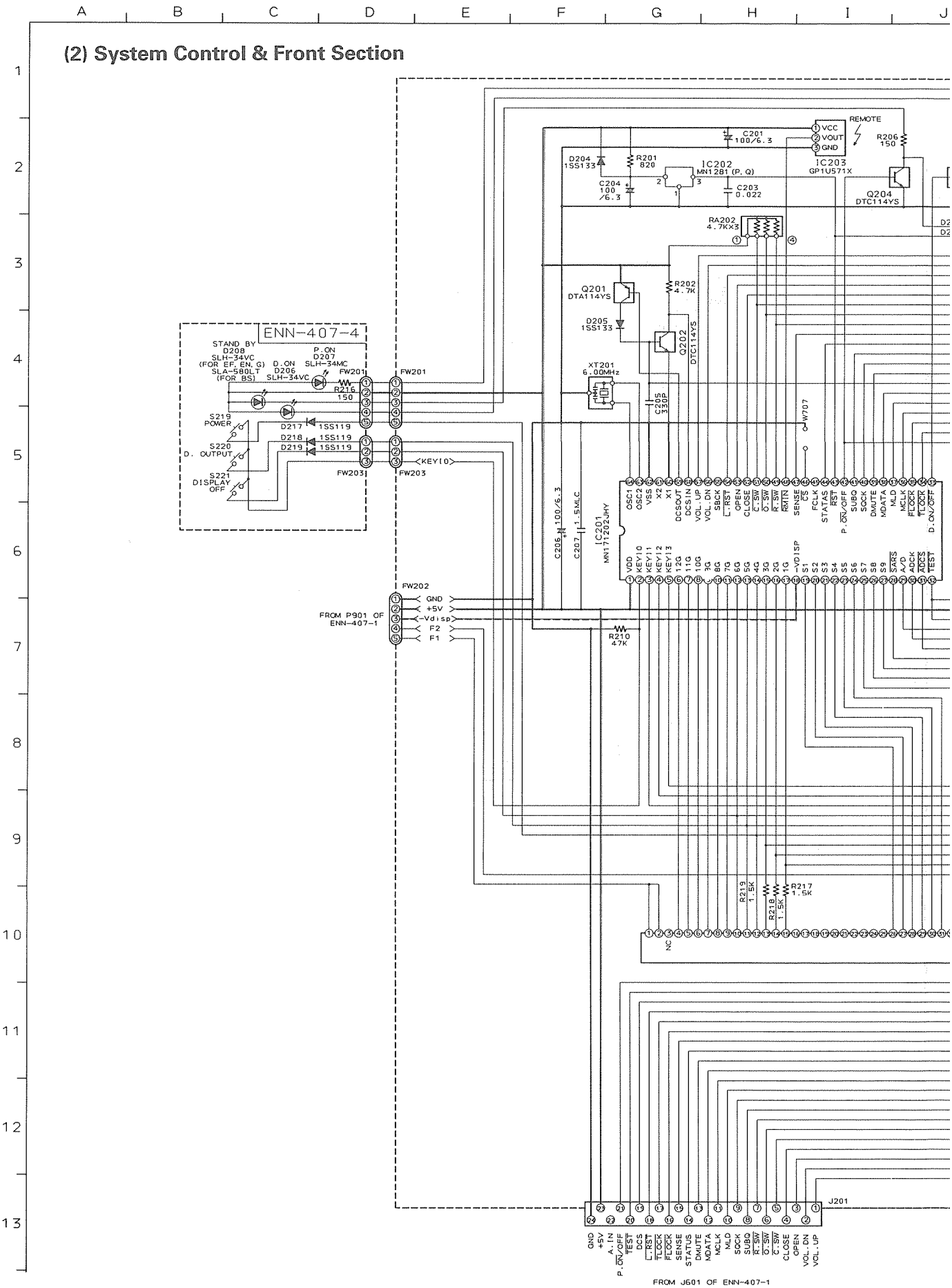
Notes:

1. ———— indicates + B power supply.
2. – – – – – – indicates – B power supply.
3. ▒▒▒▒ indicates main signal path.
4. When replacing the parts in the shaded are (▒▒▒▒) and those marked with ⚠ , be sure to use the designated parts to ensure safety.
5. The design and contents are subject to change without notice.

K L M N O P Q R S


ENN-407-5
ENN-407-2
F1X OUT
LCH
RCH
TO J301 OF ENN-407-1
TO PW202 OF ENN-407-1
SEE POWER SUPPLY BLOCK OF SHEET 1/2

(2) System Control & Front Section



ENN-407-3

R205
150

Q203
DTC114YS

Q205
DTC114YS

D220 1SS133
D221 1SS133

R215
10K

VOL.UP
VOL.DN
L.RST
OPEN
CLOSE
C.SW
O.SW
R.SW
SENSE
STATUS
SUBQ
SQCK
DMUTE
DCS
MDATA
MLD
MCLK
FLOCK
TLOCK
P.ON/OFF

MCLK
FLOCK
TLOCK
D.ON/OFF

A/D
ADCK
ADCK
TEST

R214
10K

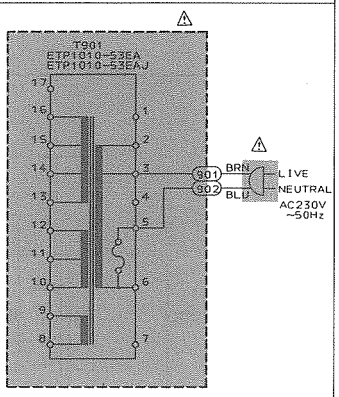
TEST

RA201
10KX4

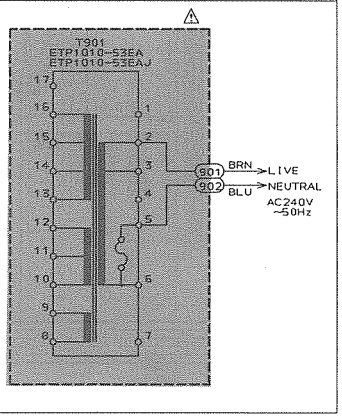
FL201
ELU0001-178
FL DISPLAY

POWER SUPPLY BLOCK

EF (FOR CONTINENTAL EUROPE)
EN (FOR SCANDINAVIA)
G (FOR GERMANY)



BS (FOR U, K)



KEY11
KEY12
KEY13

6G
5G
4G
3G
2G
1G

D211 1SS119
D212 1SS119
D213 1SS119
D214 1SS119
D215 1SS119
D216 1SS119

S201 ▶/❚❚
S202 VOL.DN
S203 VOL.UP
S204 ▶▶
S205 ◀◀
S206 ▲

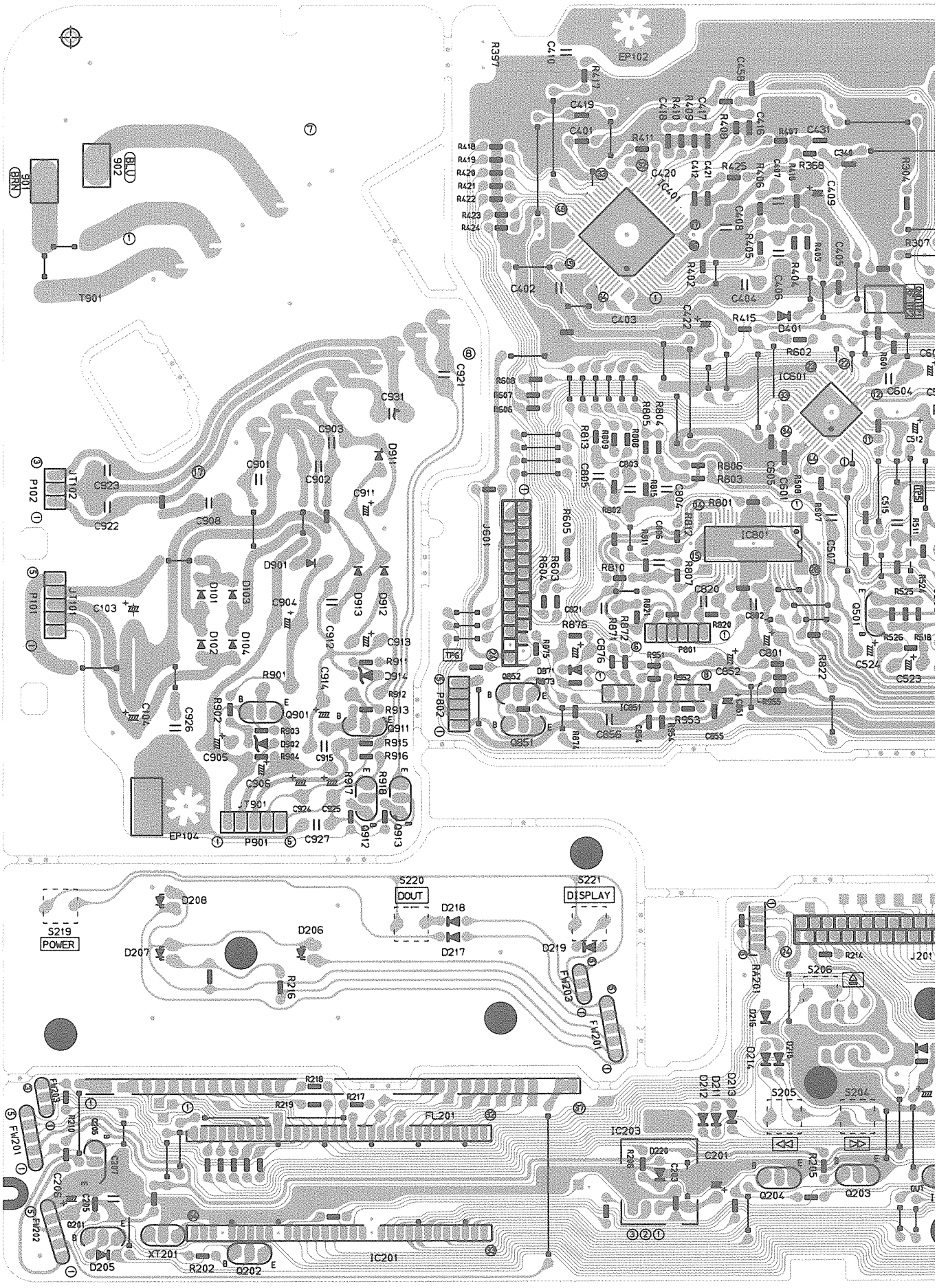
S207 ■
S208 5
S209 4
S210 3
S211 2
S212 1

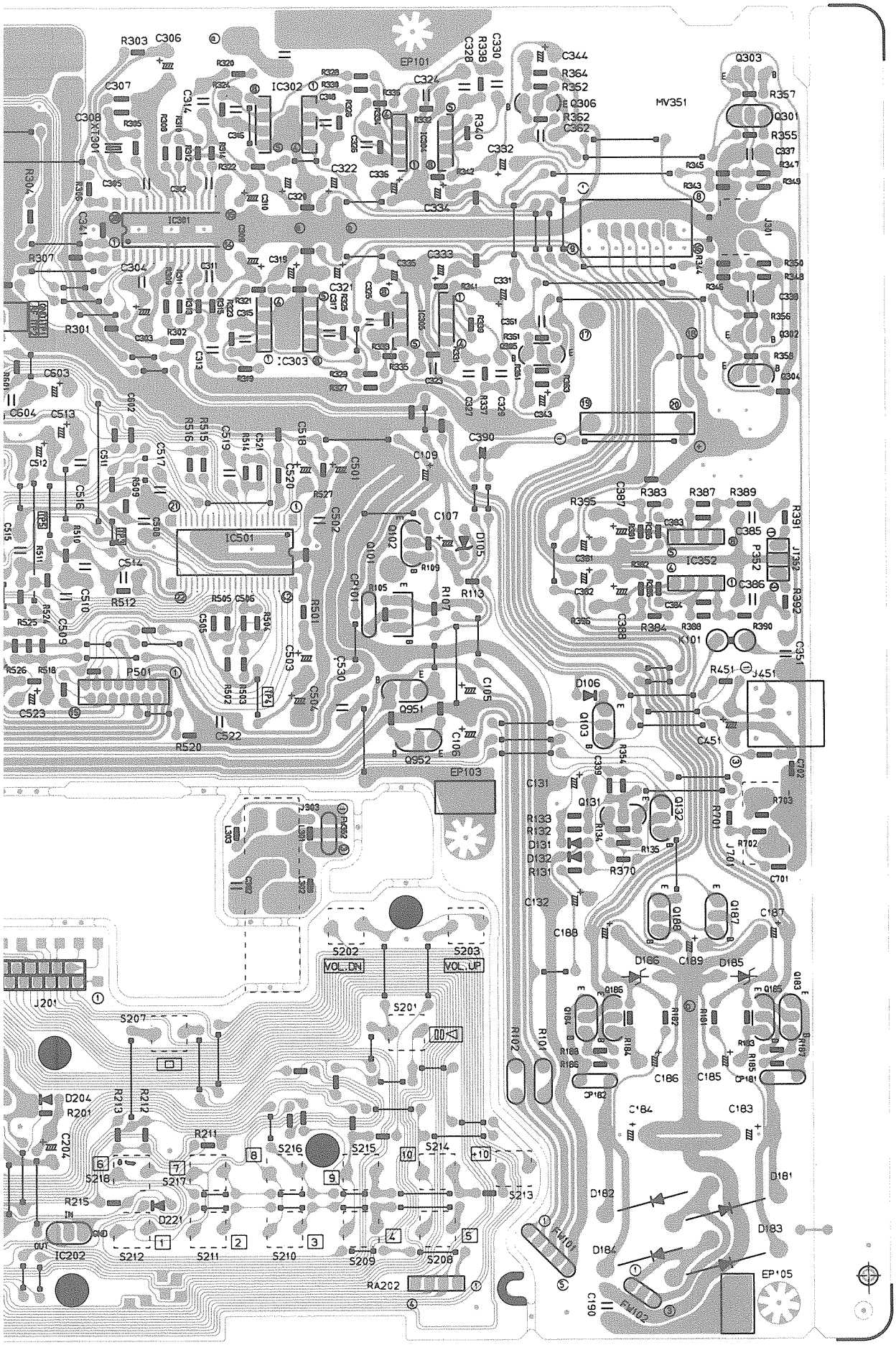
S213 +10
S214 10
S215 9
S216 8
S217 7
S218 6

R211 47K
R212 47K
R213 47K

Printed Circuit Boards

■ Front & Servo P.C.B. & Power Supply P.C. Board (ENN-407)




R303
C306
EP101
C307
IC302
C324
C330
C328
C338
C344
R364
R352
Q306
R362
C362
MV351
Q303
R357
Q301
R355
C337
R347
R349
C308
XT301
R305
C314
C322
C332
R340
C336
C334
R304
C341
IC301
R307
C304
C319
C333
C321
C331
C361
R351
C305
R301
C303
IC303
C323
C327
C337
C343
C390
C603
C604
C513
C512
C511
C517
C516
C515
C518
C519
C521
C520
C501
C109
R527
C502
IC501
C107
D105
Q102
Q101
CP101
R109
R105
R107
R113
C514
R512
R510
R511
C510
C509
R525
R524
R505
C506
C505
R504
R501
C503
C530
R526
R518
P501
C523
R503
R502
TP4
C504
R520
C522
Q951
Q952
C105
C106
EP103
C131
Q131
Q132
R133
R132
D131
D132
R131
R134
R135
R370
R701
J701
C701
C132
C188
Q186
Q187
C187
D186
C189
D185
Q183
Q185
R187
R181
R183
R185
CP181
C186
C185
C184
C183
D181
D182
D183
D184
EP105
C190
FW102
FW101
J303
L303
L301
L302
C302
J201
S202
VOL.DN
S203
VOL.UP
S201
S207
R213
R212
D204
R201
C204
R211
S216
S215
S214
S218
S217
S213
R215
IN
GND
OUT
D221
IC202
S212
S211
S210
S209
S208
RA202
R102
R101
R383
R387
R389
R355
C387
C385
P352
IC352
C386
R391
R392
R388
R390
K101
C351
R451
J451
D106
Q103
C451
C702
R703
R702
R354
C339
C131

(No. 20481)

PARTS LIST

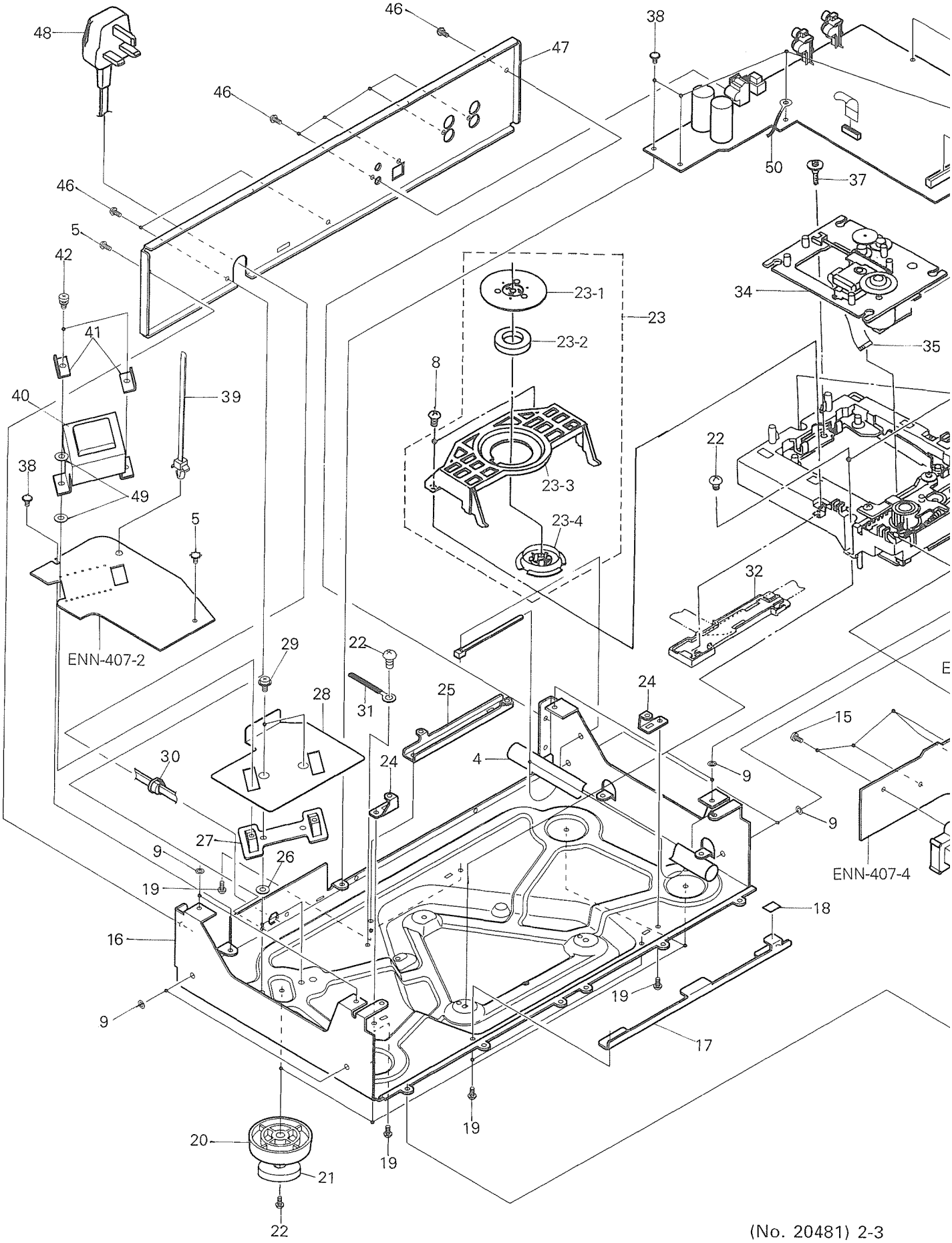
Note : All printed circuit borads and its assemblies are not available as service parts.

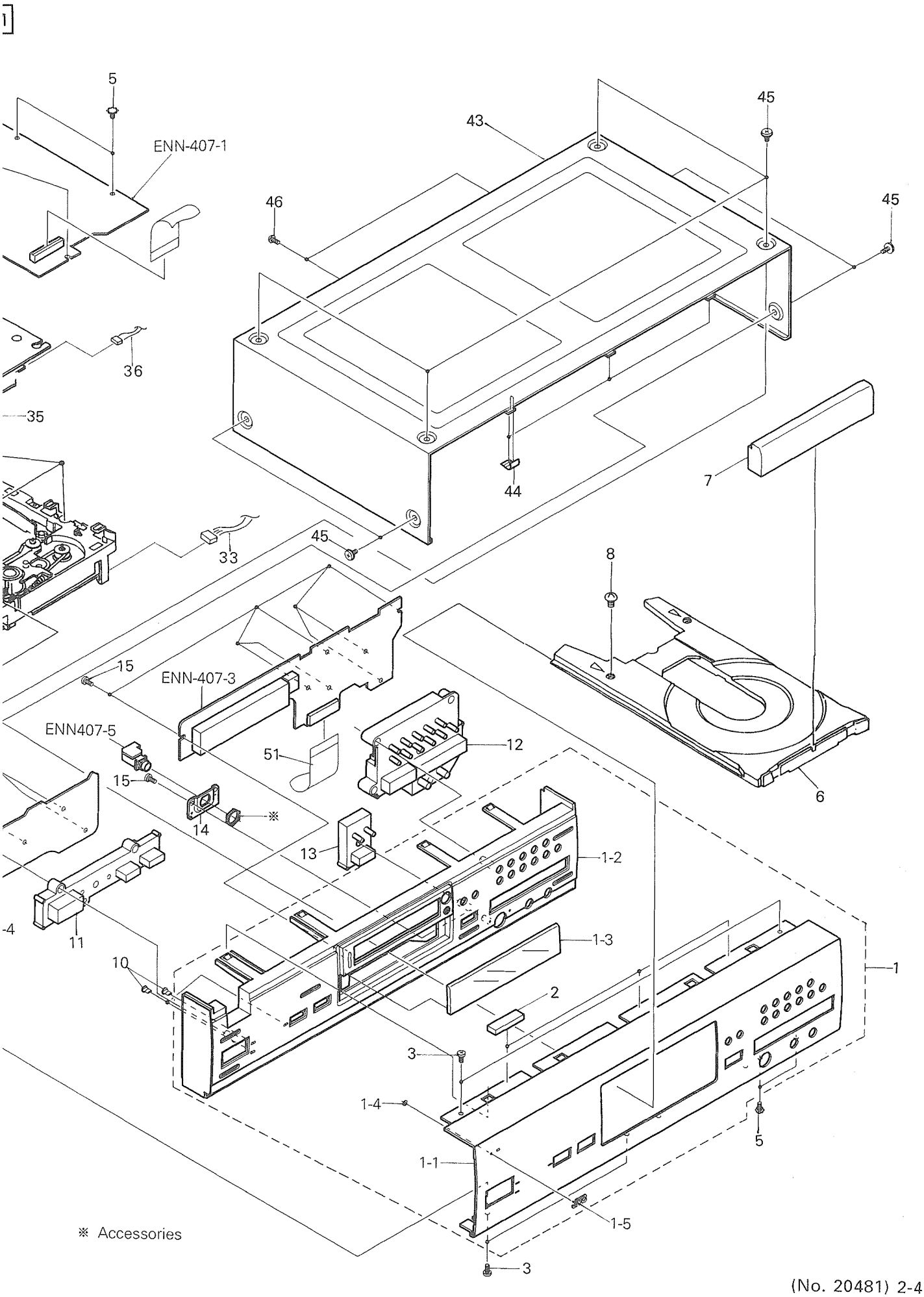
Contents

General Exploded View and Parts List 2-3
CD Mechanism Ass'y and Parts List 2-7
Printed Circuit Board Ass'y and Parts List 2-9
■ ENN-407 □ Main PC Board Ass'y 2-9
Accessories List 2-15
Packing Materials and Part Numbers 2-16

General Exploded View and Parts List

Symbol No. M 1 M M




5
ENN-407-1
43
45
46
45
36
35
44
7
45
33
8
15
ENN-407-3
ENN407-5
51
12
6
15
14
※
13
1-2
11
1-3
10
1
2
3
1-4
5
1-1
1-5
3
※ Accessories

Parts List

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	1	EFP-XLZ574BKE(S	FRONT PANEL ASSY	1		
	1-1	E102829-002	FRONT PANEL	1		
	1-2	E102832-002ST	FRONT BASE	1		
	1-3	E308862-002	WINDOW SCREEN	1		
	1-4	E60912-003	SPEED NUT	1		
	1-5	VJD5429-001	JVC MARK	1		
	2	E306805-092	SPACER	3		
	3	SDSG3008M	SCREW	5		
	4	QXT6950-220	TUBE	1		
	5	E74266-002	SPECIAL SCREW	6		
	6	E102823-001	TRAY	1		
	7	E308868-001	FITTING	1		
	8	SBSF3008M	TAPPING SCREW	3		
	9	E73967-004	SPACER	8		
	10	FSJD4001-001	POWER INDICATOR	3		
	11	E208098-001	PUSH BUTTON	1		
	12	E208099-001	PUSH BUTTON	1		
	13	E308866-001	PUSH BUTTON	1		
	14	E408000-002ST	HEADPHONE BRACKET	1		
	15	SDSF2608Z	SCREW	12		
	16	E102831-004ST	CHASSIS BASE	1		
	17	E308871-001ST	BOTTOM BRACKET	1		
	18	E306805-104	SPACER	1		
	19	SBSG3008CC	TAPPING SCREW	6		
	20	FSYH3001-006SS	FOOT	4		
	21	E408311-002	SPACER	4		
	22	SBST3008Z	TAPPING SCREW	8		
	23	E306837-005	CLAMPER BASE ASSY	1		
	23-1	E306836-003	YOKE PLATE	1		
	23-2	E74897-002	MAGNET	1		
	23-3	E26756-002	CLAMPER BASE	1		
	23-4	E306835-001	CLAMPER	1		
	24	E68587-004	BRACKET	2		
	25	E309015-001ST	BRACKET	1		
	26	E73967-003	SPACER	2		
⚠	27	E308870-001ST	TRANSFORMER BRACKET	1		
⚠	28	E309171-001	PROTECT COVER	1		
	29	E61661-003	SPECIAL SCREW	4		
⚠	30	QHS3876-162	CORD STOPPER	1		
⚠	31	E72018-004	WIRE CLAMP	1		
	32	E308181-221SS	FFC HOLDER	1		
	33	EWS266-B410	SOCKET WIRE ASSY	1	6PIN	
	34	----------	CD MECHANISM ASSY	1	SEE PAGE 2-7	
	35	EWPZ02-001	FFC CABLE	1	15PIN	
	36	EWS265-B408	SOCKET WIRE ASSY	1	5PIN	
	37	E406293-002	SPECIAL SCREW	1		
	38	GBSG3008CC	TAPPING SCREW	5		
	39	E307572-001	VINYL TIE	1		
⚠	40	ETP1010-53EABS	POWER TRANSFORMER	1		BS
⚠		ETP1010-53EA	POWER TRANSFORMER	1		EF
⚠		ETP1010-53EA	POWER TRANSFORMER	1		EN
⚠		ETP1010-53EA	POWER TRANSFORMER	1		G
	41	E408007-001	TRANSFORMER BRACKET	2		
	42	E65389-006	SPECIAL SCREW	2		
	43	E208097-001ST	METAL COVER	1		

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	44	E306805-110	SPACER	3		
	45	E406308-001	SPECIAL SCREW	8		
	46	E73273-003	SPECIAL SCREW	9		
	47	E208095-002ST	REAR PANEL	1		
	-	E308453-028	RATING LABEL	1		EF
	-	E308453-028	RATING LABEL	1		EN
	-	E308453-029F	RATING LABEL	1		G
⚠	48	QMP5530-0085BS	POWER CORD	1		BS
⚠		QMP3900-200	POWER CORD	1		EF
⚠		QMP3900-200	POWER CORD	1		EN
⚠		QMP3900-200	POWER CORD	1		G
	49	E73968-007	SPACER	2		
	50	E408379-001	TERMINAL WIRE	1		
	51	EWR624K-16TT	FLAT WIRE ASSY	1		
	-	E61029-005	NUMBER LABEL	1		
	-	E406507-001	MECHA C.LABEL	1		
	-	E70891-001	CLASS 1 LABEL	1		
	-	QZL1007-001	BEAB LABEL	1		BS
	-	QZL1031-101	SEV LABEL	1		EF
	-	E70027-001	APROV.LABEL	1		EN
	-	E70419-003F	G = F.MARK LABEL	1		G

⚠ : Safety Parts

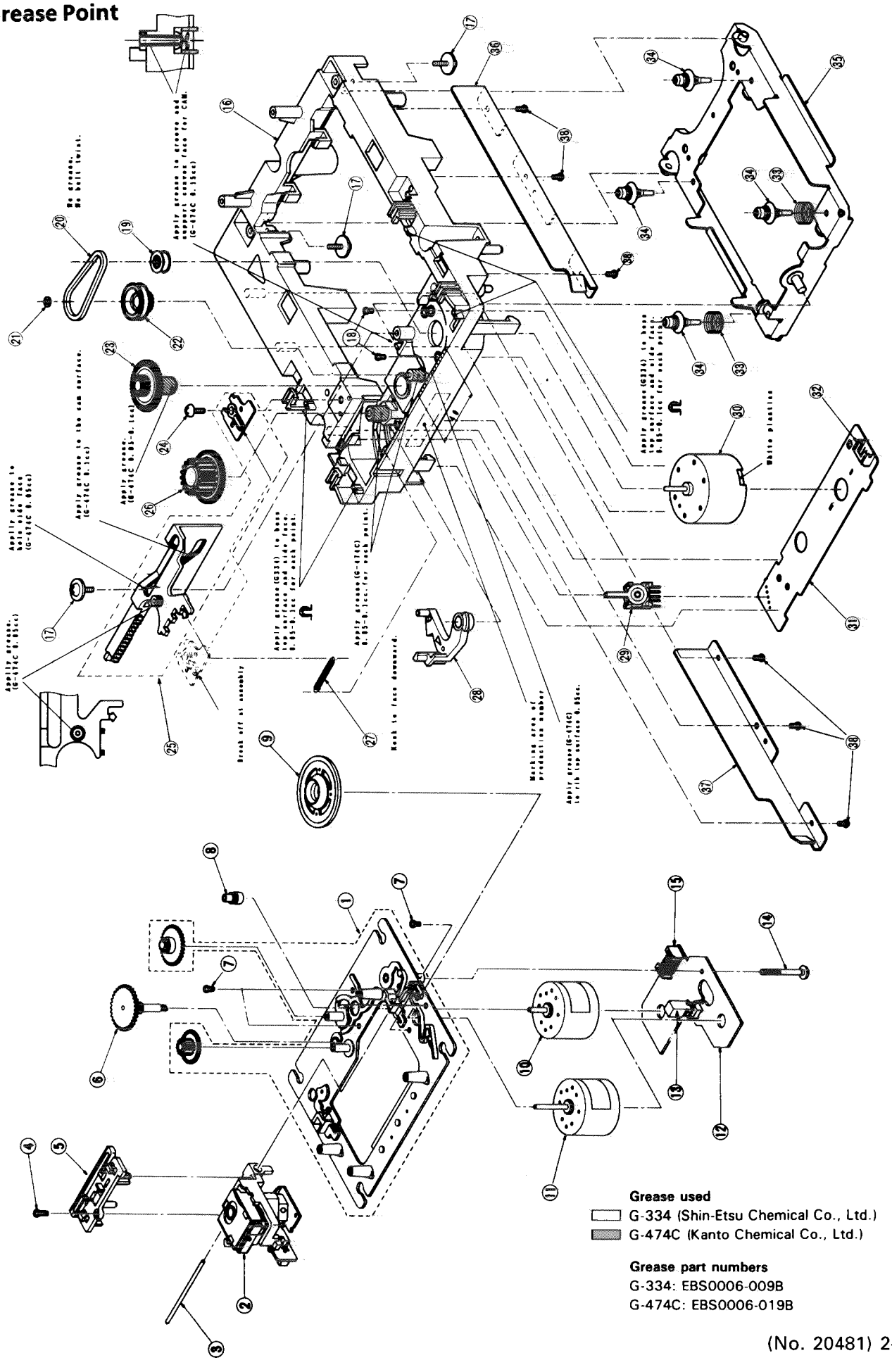
The Marks for Designated Areas

BS .... the U.K. EF ..... Continental Europe EN .... Scandinavia
G ..... Germany No mark indicates all area.

CD Mechanism Ass'y and Parts List

Symbol No. M 2 M M

■ Grease Point



Grease used

G-334 (Shin-Etsu Chemical Co., Ltd.)

G-474C (Kanto Chemical Co., Ltd.)

Grease part numbers

G-334: EBS0006-009B

G-474C: EBS0006-019B

■ Parts List (CD Mechanism Ass'y)

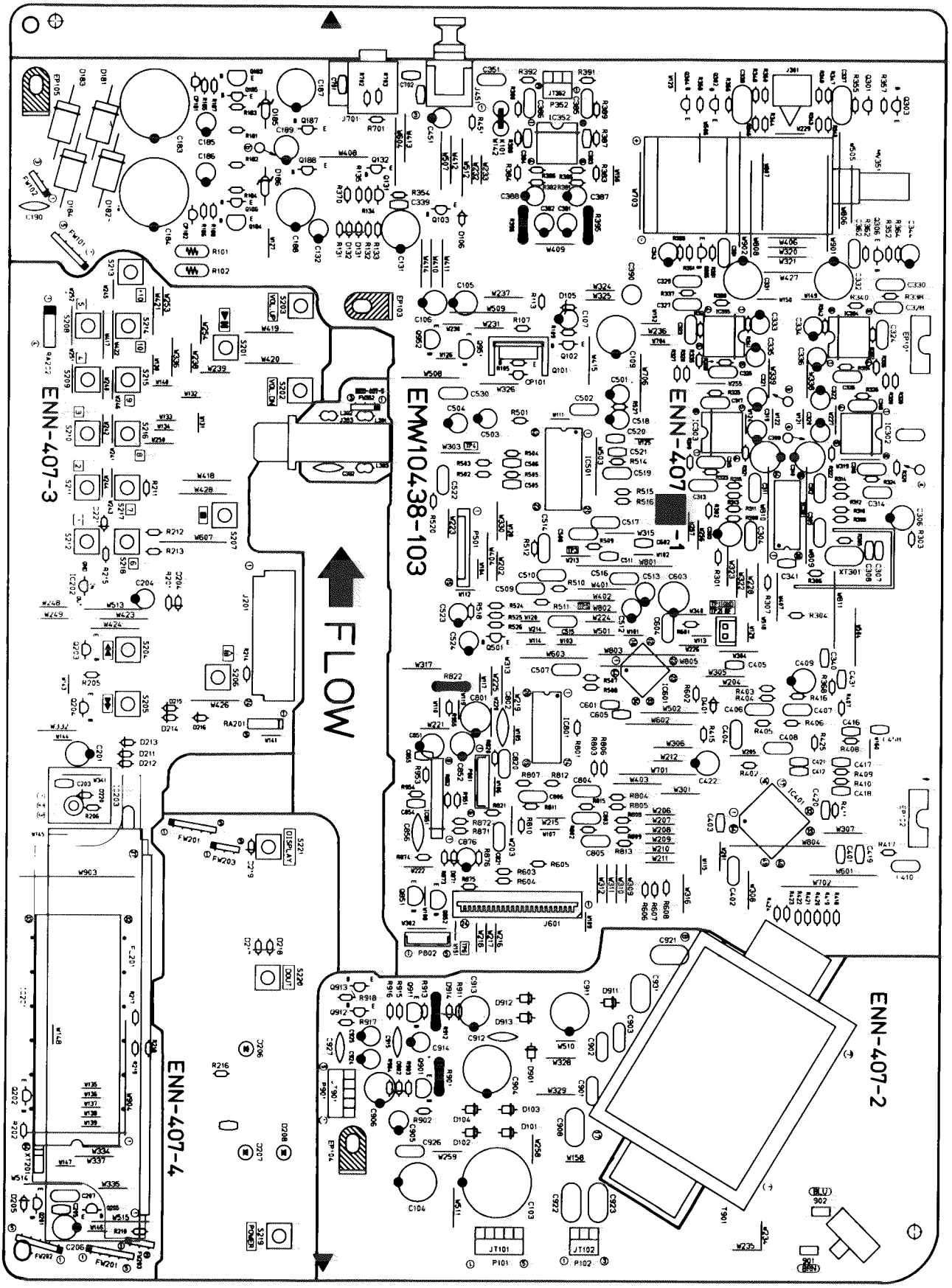
Symbol No. M 2 M M

Item	Part Number	Part Name	Q'ty	Description	Area
1	EPB-002A	MECHANISM BASE ASSY	1		
2	OPTIMA-6S	PICK UP ASSY	1		
3	E406777-001	SHAFT	1		
4	SDSF2006Z	SCREW	1		
5	E307746-001	CD RACK	1		
6	EPB-003A	MECHANISM BASE ASSY	1		
7	SDSP2003N	SCREW	4		
8	E406750-001	PINION GEAR	1		
9	EPB-001D	TURN TABLE	1		
10	E406784-001	DC MOTOR	1		
11	E406783-001	DC MOTOR	1		
12	EMW10190-001(S)	CIRCUIT BOARD	1		
13	ESB1100-005	LEAF SWITCH	1		
14	E75832-001	SPECIAL SCREW	1		
15	EMV5109-006B	PLUG ASSY	1	6PIN	
16	E102357-222	LOADING BASE	1		
17	E65923-003	SCREW	3		
18	SPSK2640Z	SCREW	2		
19	E75984-221	MOTOR PULLEY	1		
20	E75950-002	BELT	1		
21	E60912-005SS	SPEED NUT	1		
22	E75985-221	GEAR (1)	1		
23	E75986-221SS	GEAR (2)	1		
24	SBSF3008Z	SCREW	1		
25	E307252-331	CAM PLATE	1		
26	E75987-221SS	GEAR (3)	1		
27	E75989-001	SPRING	1		
28	E307162-331	LEVER	1		
29	ESS1200-002	SLIDE SWITCH	1		
30	RF-500TB-12560	MOTOR	1		
31	EMW10255-002(S)	CIRCUIT BOARD	1		
32	EMV5109-005B	PLUG ASSY	1	5PIN	
33	E406871-001	SPRING	2		
34	E406294-002	INSULATOR	4		
35	E307179-332	ELEVATOR BASE ASSY	1		
36	E308839-001	STAY(R)	1		
37	E308838-001	STAY(L)	1		
38	SBSF2008Z	SCREW	6		

Printed Circuit Board Ass'y and Parts List

■ ENN-407 □ Main PC Board Assy

Note: ENN-407 □ varies according to the areas employed.See note (1) when placing an order.



Note (1)

PC Board Ass'y	Version	Designated Areas
ENN-407 [A] BS	BS	the U.K.
ENN-407 [B]	EF EN	Continental Europe Scandinavia
ENN-407 [C]	G	Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q101	2SB1565(E,F)	SI.TRANSIST ROHM	
	Q102	2SC1775AV(F1)	SI.TRANSIST HITACHI	BS
	Q102	2SC1775AV(F1)	SI.TRANSIST HITACHI	EF
	Q102	2SC1775AV(F1)	SI.TRANSIST HITACHI	EN
	Q102	2SC1775AV(F1)	SI.TRANSIST HITACHI	G
	Q103	DTA114YS	DIGITAL TRA ROHM	BS
	Q103	DTA114YS	DIGITAL TRA ROHM	EF
	Q103	DTA114YS	DIGITAL TRA ROHM	EN
	Q103	DTA114YS	DIGITAL TRA ROHM	G
	Q131	2SA933S(RS)	SI.TRANSIST	BS
	Q131	2SA933S(RS)	SI.TRANSIST	EF
	Q131	2SA933S(RS)	SI.TRANSIST	EN
	Q131	2SA933S(RS)	SI.TRANSIST	G
	Q132	DTC114YS	DIGITAL TRA ROHM	BS
	Q132	DTC114YS	DIGITAL TRA ROHM	EF
	Q132	DTC114YS	DIGITAL TRA ROHM	EN
	Q132	DTC114YS	DIGITAL TRA ROHM	G
	Q183	2SA1208(S)	SI.TRANSIST SANYO	BS
	Q183	2SA1208(S)	SI.TRANSIST SANYO	EF
	Q183	2SA1208(S)	SI.TRANSIST SANYO	EN
	Q183	2SA1208(S)	SI.TRANSIST SANYO	G
	Q184	2SC2910(T)	SI.TRANSIST SANYO	BS
	Q184	2SC2910(T)	SI.TRANSIST SANYO	EF
	Q184	2SC2910(T)	SI.TRANSIST SANYO	EN
	Q184	2SC2910(T)	SI.TRANSIST SANYO	G
	Q185	2SC2546(D,E)	SI.TRANSIST HITACHI	
	Q186	2SA1084(D,E)	SI.TRANSIST	
	Q187	DTA114YS	DIGITAL TRA ROHM	BS
	Q187	DTA114YS	DIGITAL TRA ROHM	EF
	Q187	DTA114YS	DIGITAL TRA ROHM	EN
	Q187	DTC114YS	DIGITAL TRA ROHM	G
	Q188	DTA114YS	DIGITAL TRA ROHM	BS
	Q188	DTA114YS	DIGITAL TRA ROHM	EF
	Q188	DTA114YS	DIGITAL TRA ROHM	EN
	Q188	DTA114YS	DIGITAL TRA ROHM	G
	Q201	DTA114YS	DIGITAL TRA ROHM	BS
	Q201	DTA114YS	DIGITAL TRA ROHM	EF
	Q201	DTA114YS	DIGITAL TRA ROHM	EN
	Q201	DTA114YS	DIGITAL TRA ROHM	G
	Q202	DTC114YS	DIGITAL TRA ROHM	BS
	Q202	DTC114YS	DIGITAL TRA ROHM	EF
	Q202	DTC114YS	DIGITAL TRA ROHM	EN
	Q202	DTC114YS	DIGITAL TRA ROHM	G
	Q203	DTC114YS	DIGITAL TRA ROHM	BS
	Q203	DTC114YS	DIGITAL TRA ROHM	EF
	Q203	DTC114YS	DIGITAL TRA ROHM	EN
	Q203	DTC114YS	DIGITAL TRA ROHM	G
	Q204	DTC114YS	DIGITAL TRA ROHM	BS
	Q204	DTC114YS	DIGITAL TRA ROHM	EF
	Q204	DTC114YS	DIGITAL TRA ROHM	EN
	Q204	DTC114YS	DIGITAL TRA ROHM	G
	Q205	DTC114YS	DIGITAL TRA ROHM	BS
	Q205	DTC114YS	DIGITAL TRA ROHM	EF
	Q205	DTC114YS	DIGITAL TRA ROHM	EN
	Q205	DTC114YS	DIGITAL TRA ROHM	G
	Q301	2SC3068	SI.TRANSIST SANYO	
	Q302	2SC3068	SI.TRANSIST SANYO	
	Q303	2SC3068	SI.TRANSIST SANYO	EF
	Q304	2SC3068	SI.TRANSIST SANYO	EF
	Q305	2SD1302	SI.TRANSIST MATSUSHITA	
	Q306	2SD1302	SI.TRANSIST MATSUSHITA	
	Q501	2SA950(O,Y)	SI.TRANSIST TOSHIBA	BS
	Q501	2SA950(O,Y)	SI.TRANSIST TOSHIBA	EF
	Q501	2SA950(O,Y)	SI.TRANSIST TOSHIBA	EN
	Q501	2SA950(O,Y)	SI.TRANSIST TOSHIBA	G
	Q851	2SC2060(Q,R)	SI.TRANSIST ROHM	BS
	Q851	2SC2060(Q,R)	SI.TRANSIST ROHM	EF
	Q851	2SC2060(Q,R)	SI.TRANSIST ROHM	EN
	Q851	2SC2060(Q,R)	SI.TRANSIST ROHM	G
	Q852	2SA934(Q,R)	SI.TRANSIST ROHM	BS
	Q852	2SA934(Q,R)	SI.TRANSIST ROHM	EF
	Q852	2SA934(Q,R)	SI.TRANSIST ROHM	EN
	Q852	2SA934(Q,R)	SI.TRANSIST ROHM	G
	Q901	2SC1775AV(F1)	SI.TRANSIST HITACHI	BS
	Q901	2SC1775AV(F1)	SI.TRANSIST HITACHI	EF
	Q901	2SC1775AV(F1)	SI.TRANSIST HITACHI	EN
	Q901	2SC1775AV(F1)	SI.TRANSIST HITACHI	G
	Q911	2SA934(Q,R)	SI.TRANSIST ROHM	BS
	Q911	2SA934(Q,R)	SI.TRANSIST ROHM	EF
	Q911	2SA934(Q,R)	SI.TRANSIST ROHM	EN

⚠ : SAFETY PARTS

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q911	2SA934(Q,R)	SI.TRANSIST ROHM	G
	Q912	2SD2144S(VW)	SI.TRANSIST ROHM	BS
	Q912	2SD2144S(VW)	SI.TRANSIST ROHM	EF
	Q912	2SD2144S(VW)	SI.TRANSIST ROHM	EN
	Q912	2SD2144S(VW)	SI.TRANSIST ROHM	G
	Q913	2SD2144S(VW)	SI.TRANSIST ROHM	BS
	Q913	2SD2144S(VW)	SI.TRANSIST ROHM	EF
	Q913	2SD2144S(VW)	SI.TRANSIST ROHM	EN
	Q913	2SD2144S(VW)	SI.TRANSIST ROHM	G
	Q951	2SC2060(Q,R)	SI.TRANSIST ROHM	BS
	Q951	2SC2060(Q,R)	SI.TRANSIST ROHM	EF
	Q951	2SC2060(Q,R)	SI.TRANSIST ROHM	EN
	Q951	2SC2060(Q,R)	SI.TRANSIST ROHM	G
	Q952	2SA934(Q,R)	SI.TRANSIST ROHM	BS
	Q952	2SA934(Q,R)	SI.TRANSIST ROHM	EF
	Q952	2SA934(Q,R)	SI.TRANSIST ROHM	EN
	Q952	2SA934(Q,R)	SI.TRANSIST ROHM	G

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC201	MN171202JHY	I.C(MICRO-C MATSUSHITA	BS
	IC201	MN171202JHY	I.C(MICRO-C MATSUSHITA	EF
	IC201	MN171202JHY	I.C(MICRO-C MATSUSHITA	EN
	IC201	MN171202JHY	I.C(MICRO-C MATSUSHITA	G
	IC202	MN1281(P,Q)	I.C(DIGI-MO MATSUSHITA	
	IC203	GP1U571X	INFRARED DE SHARP	
	IC301	MN35502	I.C(DIGI-MO MATSUSHITA	
	IC302	VC4580D	I.C(MONO-AN	
	IC303	VC4580D	I.C(MONO-AN	
	IC304	VC4580D	I.C(MONO-AN	
	IC305	VC4580D	I.C(MONO-AN	
	IC352	VC4580D	I.C(MONO-AN	
	IC401	MN6626M	I.C(DIGI-MO MATSUSHITA	
	IC501	AN8801SC	I.C(MONO-AN MATSUSHITA	
	IC601	MN6650AC	I.C(DIGI-MO MATSUSHITA	
	IC801	BA6398FPX	I.C(MONO-AN ROHM	
	IC851	NJM4558L	I.C(MONO-AN DAINICHI	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D101	11E2	SI.DIODE NIHONINTER	
	D102	11E2	SI.DIODE NIHONINTER	
	D103	11E2	SI.DIODE NIHONINTER	
	D104	11E2	SI.DIODE NIHONINTER	
	D105	MTZ5.6JA	ZENER DIODE ROHM	BS
	D105	MTZ5.6JA	ZENER DIODE ROHM	EF
	D105	MTZ5.6JA	ZENER DIODE ROHM	EN
	D105	MTZ5.6JA	ZENER DIODE ROHM	G
	D106	1SS133	SI.DIODE ROHM	BS
	D106	1SS133	SI.DIODE ROHM	EF
	D106	1SS133	SI.DIODE ROHM	EN
	D106	1SS133	SI.DIODE ROHM	G
	D131	1SS133	SI.DIODE ROHM	BS
	D131	1SS133	SI.DIODE ROHM	EF
	D131	1SS133	SI.DIODE ROHM	EN
	D131	1SS133	SI.DIODE ROHM	G
	D132	1SS133	SI.DIODE ROHM	BS
	D132	1SS133	SI.DIODE ROHM	EF
	D132	1SS133	SI.DIODE ROHM	EN
	D132	1SS133	SI.DIODE ROHM	G
	D181	30DL2FA3	DIODE NIHONINTER	
	D182	30DL2FA3	DIODE NIHONINTER	
	D183	30DL2FA3	DIODE NIHONINTER	
	D184	30DL2FA3	DIODE NIHONINTER	
	D185	HZ18-1L	ZENER DIODE HITACHI	
	D186	HZ18-1L	ZENER DIODE HITACHI	
	D204	1SS133	SI.DIODE ROHM	BS
	D204	1SS133	SI.DIODE ROHM	EF
	D204	1SS133	SI.DIODE ROHM	EN
	D204	1SS133	SI.DIODE ROHM	G
	D205	1SS133	SI.DIODE ROHM	BS
	D205	1SS133	SI.DIODE ROHM	EF
	D205	1SS133	SI.DIODE ROHM	EN
	D205	1SS133	SI.DIODE ROHM	G
	D206	SLH-34VC3F	L.E.D. ROHM	BS
	D206	SLH-34VC3F	L.E.D. ROHM	EF
	D206	SLH-34VC3F	L.E.D. ROHM	EN
	D206	SLH-34VC3F	L.E.D. ROHM	G
	D207	SLH-34MC3F	L.E.D. ROHM	BS
	D207	SLH-34MC3F	L.E.D. ROHM	EF

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D207	SLH-34MC3F	L.E.D. ROHM	EN
	D207	SLH-34MC3F	L.E.D. ROHM	G
	D208	SLA-580LT3F	L.E.D. ROHM	BS
	D208	SLH-34VC3F	L.E.D. ROHM	EF
	D208	SLH-34VC3F	L.E.D. ROHM	EN
	D208	SLH-34VC3F	L.E.D. ROHM	G
	D211	1SS119	SI.DIODE	BS
	D211	1SS119	SI.DIODE	EF
	D211	1SS119	SI.DIODE	EN
	D211	1SS119	SI.DIODE	G
	D212	1SS119	SI.DIODE	BS
	D212	1SS119	SI.DIODE	EF
	D212	1SS119	SI.DIODE	EN
	D212	1SS119	SI.DIODE	G
	D213	1SS119	SI.DIODE	BS
	D213	1SS119	SI.DIODE	EF
	D213	1SS119	SI.DIODE	EN
	D213	1SS119	SI.DIODE	G
	D214	1SS119	SI.DIODE	BS
	D214	1SS119	SI.DIODE	EF
	D214	1SS119	SI.DIODE	EN
	D214	1SS119	SI.DIODE	G
	D215	1SS119	SI.DIODE	BS
	D215	1SS119	SI.DIODE	EF
	D215	1SS119	SI.DIODE	EN
	D215	1SS119	SI.DIODE	G
	D216	1SS119	SI.DIODE	BS
	D216	1SS119	SI.DIODE	EF
	D216	1SS119	SI.DIODE	EN
	D216	1SS119	SI.DIODE	G
	D217	1SS119	SI.DIODE	BS
	D217	1SS119	SI.DIODE	EF
	D217	1SS119	SI.DIODE	EN
	D217	1SS119	SI.DIODE	G
	D218	1SS119	SI.DIODE	BS
	D218	1SS119	SI.DIODE	EF
	D218	1SS119	SI.DIODE	EN
	D218	1SS119	SI.DIODE	G
	D219	1SS119	SI.DIODE	BS
	D219	1SS119	SI.DIODE	EF
	D219	1SS119	SI.DIODE	EN
	D219	1SS119	SI.DIODE	G
	D220	1SS133	SI.DIODE ROHM	BS
	D220	1SS133	SI.DIODE ROHM	EF
	D220	1SS133	SI.DIODE ROHM	EN
	D220	1SS133	SI.DIODE ROHM	G
	D221	1SS133	SI.DIODE ROHM	BS
	D221	1SS133	SI.DIODE ROHM	EF
	D221	1SS133	SI.DIODE ROHM	EN
	D221	1SS133	SI.DIODE ROHM	G
	D401	1SS133	SI.DIODE ROHM	
	D871	1SS133	SI.DIODE ROHM	BS
	D871	1SS133	SI.DIODE ROHM	EF
	D871	1SS133	SI.DIODE ROHM	EN
	D871	1SS133	SI.DIODE ROHM	G
	D901	11E2	SI.DIODE NIHONINTER	
	D902	MTZ5.6JA	ZENER DIODE ROHM	BS
	D902	MTZ5.6JA	ZENER DIODE ROHM	EF
	D902	MTZ5.6JA	ZENER DIODE ROHM	EN
	D902	MTZ5.6JA	ZENER DIODE ROHM	G
	D911	1SR139-200	SI.DIODE ROHM	BS
	D911	1SR139-200	SI.DIODE ROHM	EF
	D911	1SR139-200	SI.DIODE ROHM	EN
	D911	1SR139-200	SI.DIODE ROHM	G
	D912	1SR139-200	SI.DIODE ROHM	BS
	D912	1SR139-200	SI.DIODE ROHM	EF
	D912	1SR139-200	SI.DIODE ROHM	EN
	D912	1SR139-200	SI.DIODE ROHM	G
	D913	1SR139-200	SI.DIODE ROHM	BS
	D913	1SR139-200	SI.DIODE ROHM	EF
	D913	1SR139-200	SI.DIODE ROHM	EN
	D913	1SR139-200	SI.DIODE ROHM	G
	D914	RD30JSB3	ZENER DIODE NEC	BS
	D914	RD30JSB3	ZENER DIODE NEC	EF
	D914	RD30JSB3	ZENER DIODE NEC	EN
	D914	RD30JSB3	ZENER DIODE NEC	G

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C103	QETB1CM-338EE	3300MF 16V E.CAPACITO	
	C104	QETC1CM-477ZM	470MF 16V AL E.CAPAC	
	C105	QETB1CM-107	100MF 16V AL E.CAPAC	
	C106	QETB1CM-107	100MF 16V AL E.CAPAC	
	C107	QETB1HM-225	2.2MF 50V E.CAPACITO	
	C109	QETB0JM-108	1000MF 6.3V AL E.CAPAC	
	C131	QETB1CM-477M	470MF 16V E.CAPACITO	
	C132	QETB1CM-226	22MF 16V E.CAPACITO	
	C183	EET3511-478E	4700MF E.CAPACITO	BS
	C183	EET3511-478E	4700MF E.CAPACITO	EF
	C183	EET3511-478E	4700MF E.CAPACITO	EN
	C183	EET3511-478E	4700MF E.CAPACITO	G
	C184	EET3511-478E	4700MF E.CAPACITO	BS
	C184	EET3511-478E	4700MF E.CAPACITO	EF
	C184	EET3511-478E	4700MF E.CAPACITO	EN
	C184	EET3511-478E	4700MF E.CAPACITO	G
	C185	EET5010-106ZE	10MF E.CAPACITO	
	C186	EET5010-106ZE	10MF E.CAPACITO	
	C187	EET5010-476E	47MF E.CAPACITO	
	C188	EET5010-476E	47MF E.CAPACITO	
	C189	EET5010-475E	4.7MF E.CAPACITO	
	C190	EFH001J-104	METAL.MYLA	BS
	C190	EFH001J-104	METAL.MYLA	EF
	C190	EFH001J-104	METAL.MYLA	EN
	C190	EFH001J-104	METAL.MYLA	G
	C201	QER50JM-107	100MF 6.3V AL E.CAPAC	
	C203	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C204	QER50JM-107	100MF 6.3V AL E.CAPAC	
	C205	QCBB1HK-331Y	330PF 50V CER.CAPACI	
	C206	QER50JM-107	100MF 6.3V AL E.CAPAC	
	C207	QCZ0205-155	1.5MF 25V C.CAPACITO	
	C303	QETC1AM-227Z	220MF 10V AL E.CAPAC	
	C304	QCZ0205-155	1.5MF 25V C.CAPACITO	
	C305	QCZ0205-155	1.5MF 25V C.CAPACITO	
	C306	QETC1AM-476Z	47MF 10V AL E.CAPAC	
	C307	QCT30CH-180Y	18PF 50V CER.CAPACI	
	C308	QCT30CH-180Y	18PF 50V CER.CAPACI	
	C309	QETC0JM-477ZN	470MF 6.3V E.CAPACITO	
	C310	QETC0JM-477ZN	470MF 6.3V E.CAPACITO	
	C311	QCZ0205-155	1.5MF 25V C.CAPACITO	
	C312	QCZ0205-155	1.5MF 25V C.CAPACITO	
	C313	QFN81HJ-471	470PF 50V MYLAR CAPA	BS
	C313	QFN81HJ-471	470PF 50V MYLAR CAPA	EF
	C313	QFN81HJ-471	470PF 50V MYLAR CAPA	EN
	C313	QFN81HJ-471	470PF 50V MYLAR CAPA	G
	C314	QFN81HJ-471	470PF 50V MYLAR CAPA	BS
	C314	QFN81HJ-471	470PF 50V MYLAR CAPA	EF
	C314	QFN81HJ-471	470PF 50V MYLAR CAPA	EN
	C314	QFN81HJ-471	470PF 50V MYLAR CAPA	G
	C315	QFP81HG-471	470PF 50V POLYPROPY.	
	C316	QFP81HG-471	470PF 50V POLYPROPY.	
	C317	QFP81HG-471	470PF 50V POLYPROPY.	
	C318	QFP81HG-471	470PF 50V POLYPROPY.	
	C323	QFP81HJ-152	1500PF 50V POLYPROPY.	
	C324	QFP81HJ-152	1500PF 50V POLYPROPY.	
	C325	QFP81HJ-152	1500PF 50V POLYPROPY.	
	C326	QFP81HJ-152	1500PF 50V POLYPROPY.	
	C327	QFP81HG-152	1500PF 50V POLY	
	C328	QFP81HG-152	1500PF 50V POLY	
	C329	QFP81HG-822	8200PF 50V POLYPROPY.	
	C330	QFP81HG-822	8200PF 50V POLYPROPY.	
	C331	EEZ5006-476	47MF AL E.CAPAC	
	C332	EEZ5006-476	47MF AL E.CAPAC	
	C337	EFZ0101-682ZS	6800PF POLYPROPY.	
	C338	EFZ0101-682ZS	6800PF POLYPROPY.	
	C339	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C340	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C341	QCT30CH-2R2Y	2.2PF 50V CER.CAPACI	BS
	C341	QCT30CH-2R2Y	2.2PF 50V CER.CAPACI	EF
	C341	QCT30CH-2R2Y	2.2PF 50V CER.CAPACI	EN
	C341	QCT30CH-2R2Y	2.2PF 50V CER.CAPACI	G
	C343	EET2502-476N	47MF AL E.CAPAC	
	C344	EET2502-476N	47MF AL E.CAPAC	
	C351	QCS31HJ-471Z	470PF 50V CER.CAPACI	BS
	C351	QCS31HJ-471Z	470PF 50V CER.CAPACI	EF
	C351	QCS31HJ-471Z	470PF 50V CER.CAPACI	EN
	C351	QCS31HJ-471Z	470PF 50V CER.CAPACI	G
	C361	QFN81HJ-272	2700PF 50V METAL.MYLA	BS
	C361	QFN81HJ-272	2700PF 50V METAL.MYLA	EF
	C361	QFN81HJ-272	2700PF 50V METAL.MYLA	EN
	C361	QFN81HJ-272	2700PF 50V METAL.MYLA	G
	C362	QFN81HJ-272	2700PF 50V METAL.MYLA	BS
	C362	QFN81HJ-272	2700PF 50V METAL.MYLA	EF
	C362	QFN81HJ-272	2700PF 50V METAL.MYLA	EN
	C362	QFN81HJ-272	2700PF 50V METAL.MYLA	G
	C381	QETB1HM-475E	4.7MF 50V E.CAPACITO	
	C382	QETB1HM-475E	4.7MF 50V E.CAPACITO	
	C383	QCSB1HJ-470	47PF 50V CER.CAPACI	
	C384	QCSB1HJ-470	47PF 50V CER.CAPACI	
	C385	QFN81HJ-103	0.01MF 50V METAL.MYLA	BS
	C385	QFN81HJ-103	0.01MF 50V METAL.MYLA	EF
	C385	QFN81HJ-103	0.01MF 50V METAL.MYLA	EN
	C385	QFN81HJ-103	0.01MF 50V METAL.MYLA	G
	C386	QFN81HJ-103	0.01MF 50V METAL.MYLA	BS
	C386	QFN81HJ-103	0.01MF 50V METAL.MYLA	EF

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C386	QFN81HJ-103	0.01MF	50V	METAL.MYLA	EN
	C386	QFN81HJ-103	0.01MF	50V	METAL.MYLA	G
	C387	QETC1EM-226ZM	22MF	25V	E.CAPACITO	
	C388	QETC1EM-476ZJ7	47MF	25V	ELECTRO	
	C390	QEN51HM-475	4.7MF	50V	NP E.CAPAC	BS
	C390	QEN51HM-475	4.7MF	50V	NP E.CAPAC	EF
	C390	QEN51HM-475	4.7MF	50V	NP E.CAPAC	EN
	C390	QEN51HM-475	4.7MF	50V	NP E.CAPAC	G
	C392	QFV81HJ-104	0.1MF	50V	THIN FILM	BS
	C392	QFV81HJ-104	0.1MF	50V	THIN FILM	EF
	C392	QFV81HJ-104	0.1MF	50V	THIN FILM	EN
	C392	QFP81HJ-471	470PF	50V	POLYPROPY	G
	C393	QFV81HJ-104	0.1MF	50V	THIN FILM	G
	C394	QCS21HJ-680A	68PF	50V	CER.CAPACI	BS
	C394	QCS21HJ-680A	68PF	50V	CER.CAPACI	EF
	C394	QCS21HJ-680A	68PF	50V	CER.CAPACI	EN
	C394	QCS21HJ-680A	68PF	50V	CER.CAPACI	G
	C395	QCS21HJ-680A	68PF	50V	CER.CAPACI	BS
	C395	QCS21HJ-680A	68PF	50V	CER.CAPACI	EF
	C395	QCS21HJ-680A	68PF	50V	CER.CAPACI	EN
	C395	QCS21HJ-680A	68PF	50V	CER.CAPACI	G
	C401	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C402	QFV81HJ-104	0.1MF	50V	THIN FILM	
	C403	QCSB1HJ-680	68PF	50V	CER.CAPACI	
	C404	QFV81HJ-104	0.1MF	50V	THIN FILM	
	C405	QCBB1HK-471Y	470PF	50V	CER.CAPACI	
	C406	QFN81HJ-223	0.022MF	50V	METAL.MYLA	BS
	C406	QFN81HJ-223	0.022MF	50V	METAL.MYLA	EF
	C406	QFN81HJ-223	0.022MF	50V	METAL.MYLA	EN
	C406	QFN81HJ-223	0.022MF	50V	METAL.MYLA	G
	C407	QFV71HJ-474ZM	0.47MF	50V	THIN FILM	
	C408	QFV81HJ-104	0.1MF	50V	THIN FILM	
	C409	QETB1AM-107	100MF	10V	AL E.CAPAC	
	C410	QFV81HJ-104	0.1MF	50V	THIN FILM	
	C412	QCT30UJ-270	27PF	50V	CERAMIC	BS
	C412	QCT30UJ-270	27PF	50V	CERAMIC	EF
	C412	QCT30UJ-270	27PF	50V	CERAMIC	EN
	C412	QCT30UJ-270	27PF	50V	CERAMIC	G
	C419	QCT30CH-5R6Y	5.6PF	50V	CER.CAPACI	BS
	C419	QCT30CH-5R6Y	5.6PF	50V	CER.CAPACI	EF
	C419	QCT30CH-5R6Y	5.6PF	50V	CER.CAPACI	EN
	C419	QCT30CH-5R6Y	5.6PF	50V	CER.CAPACI	G
	C420	QCT30CH-5R6Y	5.6PF	50V	CER.CAPACI	BS
	C420	QCT30CH-5R6Y	5.6PF	50V	CER.CAPACI	EF
	C420	QCT30CH-5R6Y	5.6PF	50V	CER.CAPACI	EN
	C420	QCT30CH-5R6Y	5.6PF	50V	CER.CAPACI	G
	C421	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C422	QETB1AM-107	100MF	10V	AL E.CAPAC	
	C431	QCT30CH-5R6Y	5.6PF	50V	CER.CAPACI	BS
	C431	QCT30CH-5R6Y	5.6PF	50V	CER.CAPACI	EF
	C431	QCT30CH-5R6Y	5.6PF	50V	CER.CAPACI	EN
	C431	QCT30CH-5R6Y	5.6PF	50V	CER.CAPACI	G
	C451	QETB1AM-107	100MF	10V	AL E.CAPAC	
	C501	QETB1AM-107	100MF	10V	AL E.CAPAC	
	C502	QCZ0205-155	1.5MF	25V	C.CAPACITO	
	C503	QETB1AM-476	47MF	10V	E.CAPACITO	
	C504	QETB1AM-107	100MF	10V	AL E.CAPAC	
	C505	QCBB1HK-271Y	270PF	50V	CER.CAPACI	
	C506	QCBB1HK-331Y	330PF	50V	CER.CAPACI	
	C507	QFN81HJ-683	0.068MF	50V	METAL.MYLA	BS
	C507	QFN81HJ-683	0.068MF	50V	METAL.MYLA	EF
	C507	QFN81HJ-683	0.068MF	50V	METAL.MYLA	EN
	C507	QFN81HJ-683	0.068MF	50V	METAL.MYLA	G
	C508	QFN81HJ-681	680PF	50V	METAL.MYLA	BS
	C508	QFN81HJ-681	680PF	50V	METAL.MYLA	EF
	C508	QFN81HJ-681	680PF	50V	METAL.MYLA	EN
	C508	QFN81HJ-681	680PF	50V	METAL.MYLA	G
	C509	QFN81HJ-392	3900PF	50V	METAL.MYLA	BS
	C509	QFN81HJ-392	3900PF	50V	METAL.MYLA	EF
	C509	QFN81HJ-392	3900PF	50V	METAL.MYLA	EN
	C509	QFN81HJ-392	3900PF	50V	METAL.MYLA	G
	C510	QFN81HJ-393	0.039MF	50V	METAL.MYLA	BS
	C510	QFN81HJ-393	0.039MF	50V	METAL.MYLA	EF
	C510	QFN81HJ-393	0.039MF	50V	METAL.MYLA	EN
	C510	QFN81HJ-393	0.039MF	50V	METAL.MYLA	G
	C511	QCGB1HK-821	820PF	50V	CER.CAPACI	
	C512	QETB1AM-476	47MF	10V	E.CAPACITO	
	C513	QETB1AM-476	47MF	10V	E.CAPACITO	
	C514	QFV81HJ-104	0.1MF	50V	THIN FILM	
	C515	QFV81HJ-104	0.1MF	50V	THIN FILM	
	C516	QFV81HJ-104	0.1MF	50V	THIN FILM	
	C517	QFN81HJ-332	3300PF	50V	METAL.MYLA	BS
	C517	QFN81HJ-332	3300PF	50V	METAL.MYLA	EF
	C517	QFN81HJ-332	3300PF	50V	METAL.MYLA	EN
	C517	QFN81HJ-332	3300PF	50V	METAL.MYLA	G
	C518	QETB1HM-105	1MF	50V	AL E.CAPAC	
	C519	QFV81HJ-104	0.1MF	50V	THIN FILM	
	C520	QCSB1HJ-680	68PF	50V	CER.CAPACI	
	C521	QCT30CH-3R9Y	3.9PF	50V	CER.CAPACI	
	C522	QFV81HJ-104	0.1MF	50V	THIN FILM	
	C523	QETB1HM-106	10MF	50V	E.CAPACITO	
	C524	QETB1AM-476	47MF	10V	E.CAPACITO	
	C530	QFV81HJ-104	0.1MF	50V	THIN FILM	BS
	C530	QFV81HJ-104	0.1MF	50V	THIN FILM	EF
	C530	QFV81HJ-104	0.1MF	50V	THIN FILM	EN

⚠ :SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C530	QFV81HJ-104	0.1MF	50V	THIN FILM	G
	C601	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C602	QCXB1CM-472Y	4700PF	16V	CER.CAPACI	
	C603	QETBOJM-227	220MF	6.3V	E.CAPACITO	
	C604	QFV81HJ-104	0.1MF	50V	THIN FILM	
	C605	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C701	QCBB1HK-101Y	100PF	50V	CER.CAPACI	
	C702	QCBB1HK-101Y	100PF	50V	CER.CAPACI	
	C801	QETB1CM-227	220MF	16V	AL E.CAPAC	
	C802	QCF21HP-223A	0.022MF	50V	CER.CAPACI	
	C803	QFN81HJ-103	0.01MF	50V	METAL.MYLA	BS
	C803	QFN81HJ-103	0.01MF	50V	METAL.MYLA	EF
	C803	QFN81HJ-103	0.01MF	50V	METAL.MYLA	EN
	C803	QFN81HJ-103	0.01MF	50V	METAL.MYLA	G
	C804	QFN81HJ-472	4700PF	50V	MYLAR CAPA	BS
	C804	QFN81HJ-472	4700PF	50V	MYLAR CAPA	EF
	C804	QFN81HJ-472	4700PF	50V	MYLAR CAPA	EN
	C804	QFN81HJ-472	4700PF	50V	MYLAR CAPA	G
	C805	QFN81HJ-823	0.082MF	50V	METAL.MYLA	BS
	C805	QFN81HJ-823	0.082MF	50V	METAL.MYLA	EF
	C805	QFN81HJ-823	0.082MF	50V	METAL.MYLA	EN
	C805	QFN81HJ-823	0.082MF	50V	METAL.MYLA	G
	C806	QFN81HJ-333	0.033MF	50V	MYLAR CAPA	BS
	C806	QFN81HJ-333	0.033MF	50V	MYLAR CAPA	EF
	C806	QFN81HJ-333	0.033MF	50V	MYLAR CAPA	EN
	C806	QFN81HJ-333	0.033MF	50V	MYLAR CAPA	G
	C820	QFV81HJ-104	0.1MF	50V	THIN FILM	
	C821	QFV81HJ-104	0.1MF	50V	THIN FILM	
	C851	QETB1CM-107	100MF	16V	AL E.CAPAC	
	C852	QETB1CM-107	100MF	16V	AL E.CAPAC	
	C854	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C855	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C856	QCF21HP-103A	0.01MF	50V	CER.CAPACI	
	C876	QETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C901	QFV81HJ-104	0.1MF	50V	THIN FILM	
	C902	QFV81HJ-104	0.1MF	50V	THIN FILM	
	C903	QFV81HJ-104	0.1MF	50V	THIN FILM	
	C904	QETB1EM-108M	1000MF	25V	E.CAPACITO	
	C905	QETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C906	QETBOJM-477	470MF	6.3V	AL E.CAPAC	
	C908	EFH001J-104			METAL.MYLA	BS
	C908	EFH001J-104			METAL.MYLA	EF
	C908	EFH001J-104			METAL.MYLA	EN
	C908	EFH001J-104			METAL.MYLA	G
	C911	QETB1VM-477E	470MF	35V	AL E.CAPAC	
	C912	QCF21HP-223A	0.022MF	50V	CER.CAPACI	
	C913	QETB1HM-107	100MF	50V	E.CAPACITO	
	C914	QETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C915	QCF21HP-223A	0.022MF	50V	CER.CAPACI	
	C921	EFZ0101-223S	0.022MF		POLYPROPY.	
	C924	QETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C925	QETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C926	EFH001J-104			METAL.MYLA	BS
	C926	EFH001J-104			METAL.MYLA	EF
	C926	EFH001J-104			METAL.MYLA	EN
	C926	EFH001J-104			METAL.MYLA	G
	C931	EFH001J-104			METAL.MYLA	

⚠ :SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R101	PTH8L07BB2R2N1B			POSITIVE T	
⚠	R102	PTH8L07BB2R2N1B			POSITIVE T	
	R105	QRD161J-222	2.2K	1/6W	CARBON RES	
	R107	QRD161J-221	220	1/6W	CARBON RES	
	R109	QRD161J-221	220	1/6W	CARBON RES	
	R113	QRD167J-332	3.3K	1/6W	CARBON RES	
	R131	QRD161J-221	220	1/6W	CARBON RES	
	R132	QRD161J-221	220	1/6W	CARBON RES	
	R133	QRD161J-221	220	1/6W	CARBON RES	
	R134	QRD167J-822	8.2K	1/6W	CARBON RES	
	R135	QRD161J-683	68K	1/6W	CARBON RES	
	R181	QRV144F-4701A	4.7K	1/4W	CONST.META	BS
	R181	QRV144F-4701A	4.7K	1/4W	CONST.META	EF
	R181	QRV144F-4701A	4.7K	1/4W	CONST.META	EN
	R181	QRV144F-4701A	4.7K	1/4W	CONST.META	G
	R182	QRV144F-4701A	4.7K	1/4W	CONST.META	BS
	R182	QRV144F-4701A	4.7K	1/4W	CONST.META	EF
	R182	QRV144F-4701A	4.7K	1/4W	CONST.META	EN
	R182	QRV144F-4701A	4.7K	1/4W	CONST.META	G
	R183	QRD161J-101	100	1/6W	CARBON RES	
	R184	QRD161J-101	100	1/6W	CARBON RES	
	R185	QRD161J-102	1K	1/6W	CARBON RES	BS
	R185	QRD161J-102	1K	1/6W	CARBON RES	EF
	R185	QRD161J-102	1K	1/6W	CARBON RES	EN
	R185	QRD161J-102	1K	1/6W	CARBON RES	G
	R186	QRD161J-102	1K	1/6W	CARBON RES	BS
	R186	QRD161J-102	1K	1/6W	CARBON RES	EF
	R186	QRD161J-102	1K	1/6W	CARBON RES	EN
	R186	QRD161J-102	1K	1/6W	CARBON RES	G
	R187	QRD161J-470	47	1/6W	CARBON RES	BS

⚠ :SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R187	QRD161J-470	47 1/6W CARBON RES	EF
	R187	QRD161J-470	47 1/6W CARBON RES	EN
	R187	QRD161J-470	47 1/6W CARBON RES	G
	R188	QRD161J-470	47 1/6W CARBON RES	BS
	R188	QRD161J-470	47 1/6W CARBON RES	EF
	R188	QRD161J-470	47 1/6W CARBON RES	EN
	R188	QRD161J-470	47 1/6W CARBON RES	G
	R201	QRD161J-821	820 1/6W CARBON RES	
	R202	QRD161J-472	4.7K 1/6W CARBON RES	
	R205	QRD167J-151	150 1/6W CARBON RES	BS
	R205	QRD167J-151	150 1/6W CARBON RES	EF
	R205	QRD167J-151	150 1/6W CARBON RES	EN
	R205	QRD167J-151	150 1/6W CARBON RES	G
	R206	QRD167J-151	150 1/6W CARBON RES	BS
	R206	QRD167J-151	150 1/6W CARBON RES	EF
	R206	QRD167J-151	150 1/6W CARBON RES	EN
	R206	QRD167J-151	150 1/6W CARBON RES	G
	R210	QRD161J-473	47K 1/6W CARBON RES	
	R211	QRD161J-473	47K 1/6W CARBON RES	
	R212	QRD161J-473	47K 1/6W CARBON RES	
	R213	QRD161J-473	47K 1/6W CARBON RES	
	R214	QRD161J-103	10K 1/6W CARBON RES	
	R215	QRD161J-103	10K 1/6W CARBON RES	
	R216	QRD167J-151	150 1/6W CARBON RES	
	R217	QRD167J-152	1.5K 1/6W CARBON RES	BS
	R217	QRD167J-152	1.5K 1/6W CARBON RES	EF
	R217	QRD167J-152	1.5K 1/6W CARBON RES	EN
	R217	QRD167J-152	1.5K 1/6W CARBON RES	G
	R218	QRD167J-152	1.5K 1/6W CARBON RES	BS
	R218	QRD167J-152	1.5K 1/6W CARBON RES	EF
	R218	QRD167J-152	1.5K 1/6W CARBON RES	EN
	R218	QRD167J-152	1.5K 1/6W CARBON RES	G
	R219	QRD167J-152	1.5K 1/6W CARBON RES	BS
	R219	QRD167J-152	1.5K 1/6W CARBON RES	EF
	R219	QRD167J-152	1.5K 1/6W CARBON RES	EN
	R219	QRD167J-152	1.5K 1/6W CARBON RES	G
	R301	QRD167J-680	68 1/6W CARBON RES	BS
	R301	QRD167J-680	68 1/6W CARBON RES	EF
	R301	QRD167J-680	68 1/6W CARBON RES	EN
	R301	QRD167J-680	68 1/6W CARBON RES	G
	R302	QRD167J-680	68 1/6W CARBON RES	BS
	R302	QRD167J-680	68 1/6W CARBON RES	EF
	R302	QRD167J-680	68 1/6W CARBON RES	EN
	R302	QRD167J-680	68 1/6W CARBON RES	G
	R303	QRD161J-271	270 1/6W CARBON RES	BS
	R303	QRD161J-271	270 1/6W CARBON RES	EF
	R303	QRD161J-271	270 1/6W CARBON RES	EN
	R303	QRD161J-271	270 1/6W CARBON RES	G
	R304	QRD161J-271	270 1/6W CARBON RES	
	R305	QRD161J-271	270 1/6W CARBON RES	
	R306	QRD161J-271	270 1/6W CARBON RES	BS
	R306	QRD161J-271	270 1/6W CARBON RES	EF
	R306	QRD161J-271	270 1/6W CARBON RES	EN
	R306	QRD161J-271	270 1/6W CARBON RES	G
	R307	QRD161J-271	270 1/6W CARBON RES	BS
	R307	QRD161J-271	270 1/6W CARBON RES	EF
	R307	QRD161J-271	270 1/6W CARBON RES	EN
	R307	QRD161J-271	270 1/6W CARBON RES	G
	R308	QRV144F-1802	18K 1/4W CONST.META	
	R309	QRV144F-1802	18K 1/4W CONST.META	
	R310	QRV144F-1802	18K 1/4W CONST.META	
	R311	QRV144F-1802	18K 1/4W CONST.META	
	R312	QRV144F-1802	18K 1/4W CONST.META	
	R313	QRV144F-1802	18K 1/4W CONST.META	
	R314	QRV144F-1802	18K 1/4W CONST.META	
	R315	QRV144F-1802	18K 1/4W CONST.META	
	R319	QRD161J-181	180 1/6W CARBON RES	
	R320	QRD161J-181	180 1/6W CARBON RES	
	R321	QRD161J-181	180 1/6W CARBON RES	
	R322	QRD161J-181	180 1/6W CARBON RES	
	R323	QRV144F-1002	10K 1/4W CONST.META	
	R324	QRV144F-1002	10K 1/4W CONST.META	
	R325	QRV144F-1002	10K 1/4W CONST.META	
	R326	QRV144F-1002	10K 1/4W CONST.META	
	R327	QRV144F-2001A	2K 1/4W M.F.RESIST	
	R328	QRV144F-2001A	2K 1/4W M.F.RESIST	
	R329	QRV144F-2001A	2K 1/4W M.F.RESIST	
	R330	QRV144F-2001A	2K 1/4W M.F.RESIST	
	R331	QRD161J-182	1.8K 1/6W CARBON RES	
	R332	QRD161J-182	1.8K 1/6W CARBON RES	
	R333	QRD161J-182	1.8K 1/6W CARBON RES	
	R334	QRD161J-182	1.8K 1/6W CARBON RES	
	R335	QRV144F-2001A	2K 1/4W M.F.RESIST	
	R336	QRV144F-2001A	2K 1/4W M.F.RESIST	
	R337	QRV144F-1001	1K 1/4W CONST.META	
	R338	QRV144F-1001	1K 1/4W CONST.META	
	R339	QRD161J-821	820 1/6W CARBON RES	
	R340	QRD161J-821	820 1/6W CARBON RES	
	R341	QRD161J-183	18K 1/6W CARBON RES	
	R342	QRD161J-183	18K 1/6W CARBON RES	
	R343	QRD161J-273	27K 1/6W CARBON RES	
	R344	QRD161J-273	27K 1/6W CARBON RES	
	R345	QRD161J-510	51 1/6W CARBON RES	BS
	R345	QRD161J-510	51 1/6W CARBON RES	EF
	R345	QRD161J-510	51 1/6W CARBON RES	EN

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R345	QRD161J-510	51 1/6W CARBON RES	G
	R346	QRD161J-510	51 1/6W CARBON RES	BS
	R346	QRD161J-510	51 1/6W CARBON RES	EF
	R346	QRD161J-510	51 1/6W CARBON RES	EN
	R346	QRD161J-510	51 1/6W CARBON RES	G
	R347	QRD161J-510	51 1/6W CARBON RES	BS
	R347	QRD161J-510	51 1/6W CARBON RES	EF
	R347	QRD161J-510	51 1/6W CARBON RES	EN
	R347	QRD161J-510	51 1/6W CARBON RES	G
	R348	QRD161J-510	51 1/6W CARBON RES	BS
	R348	QRD161J-510	51 1/6W CARBON RES	EF
	R348	QRD161J-510	51 1/6W CARBON RES	EN
	R348	QRD161J-510	51 1/6W CARBON RES	G
	R349	QRD161J-330	33 1/6W CARBON RES	
	R350	QRD161J-330	33 1/6W CARBON RES	
	R351	QRD161J-681	680 1/6W CARBON RES	
	R352	QRD161J-681	680 1/6W CARBON RES	
	R354	QRD161J-684	680K 1/6W CARBON RES	
	R355	QRD161J-103	10K 1/6W CARBON RES	BS
	R355	QRD161J-103	10K 1/6W CARBON RES	EF
	R355	QRD161J-103	10K 1/6W CARBON RES	EN
	R355	QRD161J-103	10K 1/6W CARBON RES	G
	R356	QRD161J-103	10K 1/6W CARBON RES	BS
	R356	QRD161J-103	10K 1/6W CARBON RES	EF
	R356	QRD161J-103	10K 1/6W CARBON RES	EN
	R356	QRD161J-103	10K 1/6W CARBON RES	G
	R357	QRD161J-103	10K 1/6W CARBON RES	
	R358	QRD161J-103	10K 1/6W CARBON RES	
	R361	QRD161J-103	10K 1/6W CARBON RES	
	R362	QRD161J-103	10K 1/6W CARBON RES	
	R363	QRD161J-273	27K 1/6W CARBON RES	
	R364	QRD161J-273	27K 1/6W CARBON RES	
	R368	QRD161J-103	10K 1/6W CARBON RES	
	R370	QRD161J-684	680K 1/6W CARBON RES	
	R375	QRD167J-151	150 1/6W CARBON RES	
	R376	QRD167J-151	150 1/6W CARBON RES	
	R381	QRD161J-473	47K 1/6W CARBON RES	
	R382	QRD161J-473	47K 1/6W CARBON RES	
	R383	QRD161J-103	10K 1/6W CARBON RES	
	R384	QRD161J-103	10K 1/6W CARBON RES	
	R385	QRD161J-273	27K 1/6W CARBON RES	
	R386	QRD161J-273	27K 1/6W CARBON RES	
	R387	QRD161J-563	56K 1/6W CARBON RES	
	R388	QRD161J-563	56K 1/6W CARBON RES	
	R389	QRD167J-680	68 1/6W CARBON RES	
	R390	QRD167J-680	68 1/6W CARBON RES	
	R391	QRD161J-390	39 1/6W CARBON RES	
	R392	QRD161J-390	39 1/6W CARBON RES	
	R393	QRD161J-820	82 1/6W CARBON RES	BS
	R393	QRD161J-820	82 1/6W CARBON RES	EF
	R393	QRD161J-820	82 1/6W CARBON RES	EN
	R393	QRD161J-820	82 1/6W CARBON RES	G
	R394	QRD161J-820	82 1/6W CARBON RES	BS
	R394	QRD161J-820	82 1/6W CARBON RES	EF
	R394	QRD161J-820	82 1/6W CARBON RES	EN
	R394	QRD161J-820	82 1/6W CARBON RES	G
⚠	R395	QRZ0077-560	56 1/4W FUSIBLE RE	
⚠	R396	QRZ0077-560	56 1/4W FUSIBLE RE	
	R402	QRD161J-823	82K 1/6W CARBON RES	
	R403	QRD161J-473	47K 1/6W CARBON RES	
	R404	QRD161J-104	100K 1/6W CARBON RES	
	R405	QRD161J-104	100K 1/6W CARBON RES	
	R406	QRD161J-471	470 1/6W CARBON RES	
	R407	QRD161J-471	470 1/6W CARBON RES	
	R408	QRD161J-102	1K 1/6W CARBON RES	
	R409	QRD161J-102	1K 1/6W CARBON RES	
	R410	QRD161J-102	1K 1/6W CARBON RES	
	R411	QRD161J-102	1K 1/6W CARBON RES	
	R415	QRD161J-2R2	2.2 1/6W CARBON RES	
	R416	QRD161J-2R2	2.2 1/6W CARBON RES	
	R417	QRD161J-103	10K 1/6W CARBON RES	
	R418	QRD161J-102	1K 1/6W CARBON RES	
	R419	QRD161J-102	1K 1/6W CARBON RES	
	R420	QRD161J-102	1K 1/6W CARBON RES	
	R421	QRD161J-102	1K 1/6W CARBON RES	
	R422	QRD161J-102	1K 1/6W CARBON RES	
	R423	QRD161J-102	1K 1/6W CARBON RES	
	R424	QRD161J-102	1K 1/6W CARBON RES	
	R425	QRD161J-102	1K 1/6W CARBON RES	
	R441	QRD161J-102	1K 1/6W CARBON RES	
	R442	QRD161J-102	1K 1/6W CARBON RES	
	R443	QRD161J-102	1K 1/6W CARBON RES	
	R451	QRD161J-2R2	2.2 1/6W CARBON RES	
	R501	QRD161J-471	470 1/6W CARBON RES	
	R502	QRD161J-472	4.7K 1/6W CARBON RES	
	R503	QRD161J-123	12K 1/6W CARBON RES	
	R504	QRD167J-153	15K 1/6W CARBON RES	
	R505	QRD161J-273	27K 1/6W CARBON RES	
	R507	QRD161J-274	270K 1/6W CARBON RES	
	R508	QRD161J-273	27K 1/6W CARBON RES	
	R509	QRD161J-103	10K 1/6W CARBON RES	
	R510	QRD161J-823	82K 1/6W CARBON RES	
	R511	QRD161J-224	220K 1/6W CARBON RES	
	R512	QRD161J-124	120K 1/6W CARBON RES	
	R514	QRD161J-103	10K 1/6W CARBON RES	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R515	QRD167J-152	1.5K 1/6W CARBON RES	
	R516	QRD167J-152	1.5K 1/6W CARBON RES	
	R518	QRD167J-121	120 1/6W CARBON RES	
	R520	QRD161J-910Y	91 1/6W CARBON RES	
	R524	QRD161J-470	47 1/6W CARBON RES	
	R525	QRD161J-470	47 1/6W CARBON RES	
	R526	QRD161J-470	47 1/6W CARBON RES	
	R527	QRD161J-2R2	2.2 1/6W CARBON RES	
	R601	QRD161J-2R2	2.2 1/6W CARBON RES	
	R602	QRD161J-102	1K 1/6W CARBON RES	
	R603	QRD161J-102	1K 1/6W CARBON RES	
	R604	QRD161J-102	1K 1/6W CARBON RES	
	R605	QRD161J-102	1K 1/6W CARBON RES	
	R606	QRD161J-102	1K 1/6W CARBON RES	
	R607	QRD161J-102	1K 1/6W CARBON RES	
	R608	QRD161J-102	1K 1/6W CARBON RES	
	R701	QRD161J-470	47 1/6W CARBON RES	
	R702	QRD161J-221	220 1/6W CARBON RES	
	R703	QRD161J-101	100 1/6W CARBON RES	
	R801	QRD161J-222	2.2K 1/6W CARBON RES	
	R802	QRD167J-153	15K 1/6W CARBON RES	
	R803	QRD161J-472	4.7K 1/6W CARBON RES	
	R804	QRD167J-223	22K 1/6W CARBON RES	
	R805	QRD167J-562	5.6K 1/6W CARBON RES	
	R806	QRD161J-124	120K 1/6W CARBON RES	
	R807	QRD167J-332	3.3K 1/6W CARBON RES	
	R808	QRD161J-243	24K 1/6W CARBON RES	
	R809	QRD167J-223	22K 1/6W CARBON RES	
	R810	QRD161J-472	4.7K 1/6W CARBON RES	
	R811	QRD161J-123	12K 1/6W CARBON RES	
	R812	QRD161J-752	7.5K 1/6W CARBON RES	
	R813	QRD167J-562	5.6K 1/6W CARBON RES	
	R815	QRD167J-562	5.6K 1/6W CARBON RES	
	R820	QRD161J-100	10 1/6W CARBON RES	
	R821	QRD161J-100	10 1/6W CARBON RES	
⚠	R822	QRZ0077-4R7	4.7 1/4W FUSE RESIS	
	R871	QRD161J-513	51K 1/6W CARBON RES	
	R872	QRD161J-513	51K 1/6W CARBON RES	
	R873	QRD161J-753	75K 1/6W CARBON RES	
	R874	QRD161J-623	62K 1/6W CARBON RES	
	R875	QRD161J-221	220 1/6W CARBON RES	
	R876	QRD161J-684	680K 1/6W CARBON RES	
⚠	R901	QRZ0077-100	10 1/4W FUSIBLE RE	
	R902	QRD161J-821	820 1/6W CARBON RES	
	R903	QRD167J-121	120 1/6W CARBON RES	
	R904	QRD161J-473	47K 1/6W CARBON RES	
	R911	QRD161J-182	1.8K 1/6W CARBON RES	
⚠	R912	QRZ0077-560	56 1/4W FUSIBLE RE	
	R913	QRD167J-121	120 1/6W CARBON RES	
	R915	QRD161J-821	820 1/6W CARBON RES	
	R916	QRD161J-821	820 1/6W CARBON RES	
	R917	QRD161J-103	10K 1/6W CARBON RES	
	R918	QRD161J-103	10K 1/6W CARBON RES	
	R951	QRD161J-513	51K 1/6W CARBON RES	
	R952	QRD161J-513	51K 1/6W CARBON RES	
	R953	QRD161J-683	68K 1/6W CARBON RES	
	R954	QRD161J-683	68K 1/6W CARBON RES	
	R955	QRD161J-221	220 1/6W CARBON RES	
	RA201	QRB049J-103	10K 1/10W RESISTOR	
	RA202	QRB035J-472	4.7K 1/8W NETWORK RE	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		SBSG3008CC	TAPPING SCR	
		E406604-001	EARTH BRACK	
		QWE690-08CC	FLAT WIRE A	
		QWE690-20RR	VINYL WIRE	
		QWE690-12RR	VINYL WIRE	
		E70859-001	EARTH PLATE	
		E70306-001	HEAT SINK	BS
		E408318-001	EARTH PLATE	BS
		E308892-001ST	FL HOLDER	BS
		E306805-075	SPACER	BS
		E3400-431	FELT SPACER	BS
		E75464-001	EARTH PLATE	BS
		E70306-001	HEAT SINK	EF
		E408318-001	EARTH PLATE	EF
		E308892-001ST	FL HOLDER	EF
		E306805-075	SPACER	EF
		E3400-431	FELT SPACER	EF
		E75464-001	EARTH PLATE	EF
		E70306-001	HEAT SINK	EN
		E408318-001	EARTH PLATE	EN
		E308892-001ST	FL HOLDER	EN
		E306805-075	SPACER	EN
		E3400-431	FELT SPACER	EN
		E75464-001	EARTH PLATE	EN
		E70306-001	HEAT SINK	G

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E408318-001	EARTH PLATE	G
		E308892-001ST	FL HOLDER	G
		E306805-075	SPACER	G
		E3400-431	FELT SPACER	G
		E75464-001	EARTH PLATE	G
	J201	EMV7123-024R	MALE CONNEC 24PIN	
	J301	EMN00TV-217A	PIN JACK	BS
	J301	EMN00TV-217A	PIN JACK	EF
	J301	EMN00TV-217A	PIN JACK	EN
	J301	EMN00TV-217A	PIN JACK	G
	J303	QMS6302-131	HEADPHONE J	
	J451	GP1F32T	OPTICAL JAC	
	J601	EMV7123-024	CONNECT TER 24PIN	
	J701	QMS3501-020	PIN JACK	
	K301	ENZ8101-007	INDUCTOR	G
	K401	ENZ8101-007	INDUCTOR	G
	K451	ENZ8101-007	INDUCTOR	G
	L301	EQL4004-1R0	INDUCTOR	
	L302	EQL4004-1R0	INDUCTOR	
	L303	EQL4004-1R0	INDUCTOR	
	P501	EMV7144-015	F.P.C. PLUG 15PIN	
	P502	EMV5111-002	CONNECTOR 2PIN	BS
	P502	EMV5111-002	CONNECTOR 2PIN	EF
	P502	EMV5111-002	CONNECTOR 2PIN	EN
	P502	EMV5111-002	CONNECTOR 2PIN	G
	P801	EMV5109-006A	CONNECT TER 6PIN	
	P802	EMV5109-005A	MALE CONNEC 5PIN	
	S201	QSQ1001-E01AJ7	PUSH SWITCH ▶/■	BS
	S201	QSQ1001-E01AJ7	PUSH SWITCH ▶/■	EF
	S201	QSQ1001-E01AJ7	PUSH SWITCH ▶/■	EN
	S201	QSQ1001-E01AJ7	PUSH SWITCH ▶/■	G
	S202	QSQ1001-E01AJ7	PUSH SWITCH VOL. DOWN	BS
	S202	QSQ1001-E01AJ7	PUSH SWITCH VOL. DOWN	EF
	S202	QSQ1001-E01AJ7	PUSH SWITCH VOL. DOWN	EN
	S202	QSQ1001-E01AJ7	PUSH SWITCH VOL. DOWN	G
	S203	QSQ1001-E01AJ7	PUSH SWITCH VOL. UP	BS
	S203	QSQ1001-E01AJ7	PUSH SWITCH VOL. UP	EF
	S203	QSQ1001-E01AJ7	PUSH SWITCH VOL. UP	EN
	S203	QSQ1001-E01AJ7	PUSH SWITCH VOL. UP	G
	S204	QSQ1001-E01AJ7	PUSH SWITCH ▶▶	BS
	S204	QSQ1001-E01AJ7	PUSH SWITCH ▶▶	EF
	S204	QSQ1001-E01AJ7	PUSH SWITCH ▶▶	EN
	S204	QSQ1001-E01AJ7	PUSH SWITCH ▶▶	G
	S205	QSQ1001-E01AJ7	PUSH SWITCH ◀◀	BS
	S205	QSQ1001-E01AJ7	PUSH SWITCH ◀◀	EF
	S205	QSQ1001-E01AJ7	PUSH SWITCH ◀◀	EN
	S205	QSQ1001-E01AJ7	PUSH SWITCH ◀◀	G
	S206	QSQ1001-E01AJ7	PUSH SWITCH ▲/■	BS
	S206	QSQ1001-E01AJ7	PUSH SWITCH ▲/■	EF
	S206	QSQ1001-E01AJ7	PUSH SWITCH ▲/■	EN
	S206	QSQ1001-E01AJ7	PUSH SWITCH ▲/■	G
	S207	QSQ1001-E01AJ7	PUSH SWITCH ■	BS
	S207	QSQ1001-E01AJ7	PUSH SWITCH ■	EF
	S207	QSQ1001-E01AJ7	PUSH SWITCH ■	EN
	S207	QSQ1001-E01AJ7	PUSH SWITCH ■	G
	S208	QSQ1001-E01AJ7	PUSH SWITCH 5	BS
	S208	QSQ1001-E01AJ7	PUSH SWITCH 5	EF
	S208	QSQ1001-E01AJ7	PUSH SWITCH 5	EN
	S208	QSQ1001-E01AJ7	PUSH SWITCH 5	G
	S209	QSQ1001-E01AJ7	PUSH SWITCH 4	BS
	S209	QSQ1001-E01AJ7	PUSH SWITCH 4	EF
	S209	QSQ1001-E01AJ7	PUSH SWITCH 4	EN
	S209	QSQ1001-E01AJ7	PUSH SWITCH 4	G
	S210	QSQ1001-E01AJ7	PUSH SWITCH 3	BS
	S210	QSQ1001-E01AJ7	PUSH SWITCH 3	EF
	S210	QSQ1001-E01AJ7	PUSH SWITCH 3	EN
	S210	QSQ1001-E01AJ7	PUSH SWITCH 3	G
	S211	QSQ1001-E01AJ7	PUSH SWITCH 2	BS
	S211	QSQ1001-E01AJ7	PUSH SWITCH 2	EF
	S211	QSQ1001-E01AJ7	PUSH SWITCH 2	EN
	S211	QSQ1001-E01AJ7	PUSH SWITCH 2	G
	S212	QSQ1001-E01AJ7	PUSH SWITCH 1	BS
	S212	QSQ1001-E01AJ7	PUSH SWITCH 1	EF
	S212	QSQ1001-E01AJ7	PUSH SWITCH 1	EN
	S212	QSQ1001-E01AJ7	PUSH SWITCH 1	G
	S213	QSQ1001-E01AJ7	PUSH SWITCH +10	BS
	S213	QSQ1001-E01AJ7	PUSH SWITCH +10	EF
	S213	QSQ1001-E01AJ7	PUSH SWITCH +10	EN
	S213	QSQ1001-E01AJ7	PUSH SWITCH +10	G
	S214	QSQ1001-E01AJ7	PUSH SWITCH 10	BS
	S214	QSQ1001-E01AJ7	PUSH SWITCH 10	EF
	S214	QSQ1001-E01AJ7	PUSH SWITCH 10	EN
	S214	QSQ1001-E01AJ7	PUSH SWITCH 10	G
	S215	QSQ1001-E01AJ7	PUSH SWITCH 9	BS
	S215	QSQ1001-E01AJ7	PUSH SWITCH 9	EF
	S215	QSQ1001-E01AJ7	PUSH SWITCH 9	EN
	S215	QSQ1001-E01AJ7	PUSH SWITCH 9	G
	S216	QSQ1001-E01AJ7	PUSH SWITCH 8	BS
	S216	QSQ1001-E01AJ7	PUSH SWITCH 8	EF
	S216	QSQ1001-E01AJ7	PUSH SWITCH 8	EN
	S216	QSQ1001-E01AJ7	PUSH SWITCH 8	G
	S217	QSQ1001-E01AJ7	PUSH SWITCH 7	BS
	S217	QSQ1001-E01AJ7	PUSH SWITCH 7	EF
	S217	QSQ1001-E01AJ7	PUSH SWITCH 7	EN
	S217	QSQ1001-E01AJ7	PUSH SWITCH 7	G

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	S218	QSQ1001-E01AJ7	PUSH SWITCH 6	BS
	S218	QSQ1001-E01AJ7	PUSH SWITCH 6	EF
	S218	QSQ1001-E01AJ7	PUSH SWITCH 6	EN
	S218	QSQ1001-E01AJ7	PUSH SWITCH 6	G
	S219	QSQ1001-E01AJ7	PUSH SWITCH POWER	BS
	S219	QSQ1001-E01AJ7	PUSH SWITCH POWER	EF
	S219	QSQ1001-E01AJ7	PUSH SWITCH POWER	EN
	S219	QSQ1001-E01AJ7	PUSH SWITCH POWER	G
	S220	QSQ1001-E01AJ7	PUSH SWITCH OUT PUT	BS
	S220	QSQ1001-E01AJ7	PUSH SWITCH OUT PUT	EF
	S220	QSQ1001-E01AJ7	PUSH SWITCH OUT PUT	EN
	S220	QSQ1001-E01AJ7	PUSH SWITCH OUT PUT	G
	S221	QSQ1001-E01AJ7	PUSH SWITCH DISPLAY OFF	BS
	S221	QSQ1001-E01AJ7	PUSH SWITCH DISPLAY OFF	EF
	S221	QSQ1001-E01AJ7	PUSH SWITCH DISPLAY OFF	EN
	S221	QSQ1001-E01AJ7	PUSH SWITCH DISPLAY OFF	G
⚠	CP101	ICP-N10	I.C.PROTECT	
⚠	CP181	ICP-N10	I.C.PROTECT	
⚠	CP182	ICP-N10	I.C.PROTECT	
	EP103	EMZ4002-001Z	EARTH PLATE	
	EP104	EMZ4002-001Z	EARTH PLATE	
	EP105	EMZ4002-001Z	EARTH PLATE	BS
	EP105	EMZ4002-001Z	EARTH PLATE	EF
	EP105	EMZ4002-001Z	EARTH PLATE	EN
	EP105	EMZ4002-001Z	EARTH PLATE	G
	FL201	ELJ0001-178	FLUORESCENT	
	FW101	EWR35B-20LST	FLAT WIRE A	
	FW102	EWR33B-16LST	FLAT WIRE A	
	FW201	EWR35B-20SST	FLAT WIRE A 5PIN	
	FW202	EWR35B-30LST	FLAT WIRE A 5PIN	BS

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	FW202	EWR35B-30LST	FLAT WIRE A 5PIN	EF
	FW202	EWR35B-30LST	FLAT WIRE A 5PIN	EN
	FW202	EWR35B-30LST	FLAT WIRE A 5PIN	G
	FW203	EWR33B-16SST	FLAT WIRE A 3PIN	
	FW352	EWR33B-45LST	FLAT WIRE A 3PIN	
	JT101	EMV7122-005	MALE CONNEC 5PIN	
	JT102	EMV7122-103	CONNECT TER 3PIN	
	JT352	EMV7122-103	CONNECT TER 3PIN	
	JT901	EMV7122-005	MALE CONNEC 5PIN	
	MV351	QVDB94B-E24F	VARIABLE RE	BS
	MV351	QVDB94B-E24F	VARIABLE RE	EF
	MV351	QVDB94B-E24F	VARIABLE RE	EN
	MV352	QVDB94B-E24F	VARIABLE RE	G
	TB901	E65508-002	TAB	BS
	TB901	E65508-002	TAB	EF
	TB901	E65508-002	TAB	EN
	TB901	E65508-002	TAB	G
	TB902	E65508-002	TAB	BS
	TB902	E65508-002	TAB	EF
	TB902	E65508-002	TAB	EN
	TB902	E65508-002	TAB	G
	XT201	ECX0060-000EM	CERAMIC RES	
	XT301	ECX0169-344KL	CRYSTAL	

⚠ : SAFETY PARTS

Accessories List

Symbol No. M 3 M M

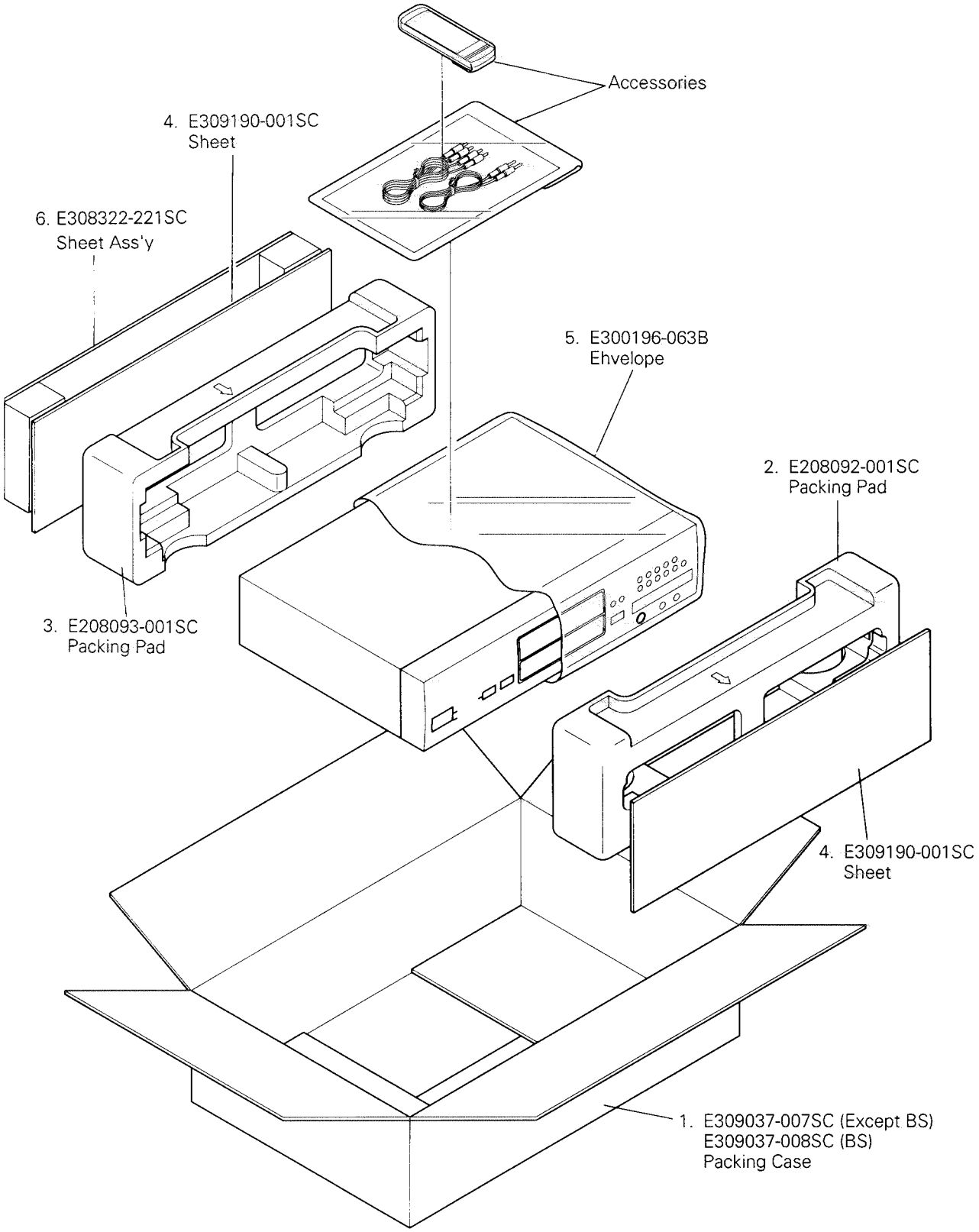
⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	1	E30580-2115ABS	INSTRUCTION BOOK	1		BS
		E30580-2115A	INSTRUCTION BOOK	1		EF
		E30580-2115A	INSTRUCTION BOOK	1		EN
		E30580-2115A	INSTRUCTION BOOK	1		G
	2	RM-SX674U	WIRE-LESS REMOTE CONTROL	1		
	3	R03BPA-2STSA	BATTERY	1		EN
	4	EWP302-011SS	SIGNAL CORD	1		
	5	EWP805-001SS	SIGNAL CORD	1		
	6	E43486-340A	SAFETY SHEET	1		BS
	7	BT20060	WARRANTY CARD	1		BS
	8	BT-20066A	WARRANTY CARD	1		BS
	9	BT-20134	WARRANTY CARD	1		G
	10	QPGA025-03505B	ENVELOPE	1		

⚠ : Safety Parts

The Marks for Designated Areas

BS .... the U.K. EF .... Continental Europe EN .... Scandinavia
G ..... Germany No mark indicates all area.

Packing Materials and Part Numbers



The Marks for Designated Areas					
BS	the U.K.	EF	Continental Europe	EF	Scandinavia
G	Germnay	No mark indicates all area.			

MEMO

XL-Z574BK

VICTOR COMPANY OF JAPAN, LIMITED
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